REPORT RESUMES

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THE DEVELOPMENT OF SELF-OTHER RELATIONSHIPS DURING PROJECT HEAD START.

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PROJECT HEAD START WAS CONCEIVED IN PART, TO INCREASE THE ORDINARILY REDUCED NUMBER OF CONNECTIONS BETWEEN THE CHILD AND OTHER PEOPLE. FOUR QUESTIONS WERE ASKED. (1) WOULD THE DEVELOPMENT OF SELF-SOCIAL CONSTRUCTS OF HEAD START CHILDREN DIFFER FROM THE DEVELOPMENT OF CHILDREN IN A CONTROL GROUP. (2) WOULD HEAD START CHILDREN DEVELOP APPROPRIATE SOCIAL TRUST. (3) WOULD THE TEACHERS' COGNITIVE STYLES AFFECT THE DEVELOPMENT OF SELF-SOCIAL CONSTRUCTS. (4) WOULD THE TEACHERS' PERCEPTIONS OF HEAD START CHILDREN AFFECT THE DEVELOPMENT OF SELF-SOCIAL CONSTRUCTS. TWO-THIRDS OF THE STUDENTS, OR 978 CHILDREN IN THE DELAWARE SUMMER 1965 HEAD START PROGRAMS WERE GIVEN A PRE-TEST ON ELEVEN TASKS FROM THE SELF-SOCIAL SYMBOLS TASKS, AND 945 OF THE CHILDREN WERE POST-TESTED, 100 NON-HEAD START CHILDREN OF A COMPARABLE BACKGROUND WERE USED AS A CONTROL GROUP AND TESTED IN THEIR HOMES AT THE SAME TIME AS THE HEAD START STUDENTS. EIGHTY PAIRS OF CHILDREN WERE PRE-TESTED ON A SHARING TASK MEASURING SOCIAL TRUST, AND 20 PAIRS WERE POST-TESTED. RESULTS OF THE TESTS SHOWED THAT THE HEAD START EXPERIENCE PRODUCED POSITIVE CHANGES IN SELF AND SELF-OTHER RELATIONSHIPS. HEAD START CHILDREN GAINED A PERCEPTION OF SELF AS BEING SIMILAR TO OTHERS AND TENDED TO MAINTAIN SELF AS CENTRAL. CONTROLS SHOWED A SHIFT TOWARD LOWER SELF-ESTEEM AND A LACK OF CHANGE FROM A SELF-DIFFERENT TO A SELF-SAME RESPONSE. (CO'D)

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1 PURPOSE AND PROCEDURES

A fundamental assumption of Project Head Start is that economic deprivation is often associated with a reduced number of connections between the child and other people and between the child and objects; and that these limited connections with objects and people provide an inadequate experiential background for associating words and concrete events, thereby retarding the learning process as it is now programmed (Cooke, 1965; OEO, 1965). In addition, certain goals suggested for guidance in planning local Head Start programs (OEO, 1965: 17-18) were directly concerned with the enhancement of self and self-other relationships:

> Helping the child's emotional and social development by encouraging self-confidence, self-expression, self-discipline, and curiosity.
>
> Increasing the child's ability to get along with others in his family and, at the same time, helping the family to understand him and his problems--thus strengthening family ties.
>
> Developing in the child and his family a responsible attitude toward society and fostering feelings of belonging to a community.
>
> Offering a chance for the child to meet and see teachers, policemen, health and welfare officers--all figures of authority--in situations which will bring respect and not fear.
>
> Helping both the child and his family to a greater confidence, self-respect and dignity.

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It is apparent that Project Head Start was conceived, in part, to ameliorate certain effects economic deprivation has had upon children with respect to their feelings about self and their quality of relationships between self and others.

Objective of the Study

It was the objective of this study to investigate whether Project Head Start would produce positive changes in self and self-other relationships, and, as a means of differentiating program effectiveness, to investigate the relationship between certain characteristics of Head Start teachers and self and self-other changes in their students. Specifically, four questions were asked:

1. Would the development of self-social constructs of children participating in Head Start differ from the development of children in a control group?
2. Would the teachers' cognitive styles affect the development of self-social constructs?
3. Would the teachers' perceptions of Head Start children affect the development of self-social constructs?
4. Would children participating in Head Start develop appropriate social trust?

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Plan of Research

The geographical area involved in this project was the state of Delaware, in which 28 Child Development Centers operated with 92 teachers, supporting administrators, and assistants for approximately 1400 children. The centers included ten in the city of Wilmington, an urban center of 300,000 population; eight in the balance of New Castle County, which is generally suburban in character; and ten in downstate, predominately rural and small town, Kent and Sussex Counties. Most centers operated for a morning session, although one had separate morning and afternoon sessions.

Testing of the children individually, using a form of the Self-Social Symbols Tasks instrument (Ziller, Alexander, & Long, 1964) was done at the centers by twelve girls during the first two and last two weeks of the Head Start Operation. These girls were, typically, June 1965 graduates of the elementary education curriculum at the University of Delaware. Testing of social trust by means of a sharing task was done during the same time periods by an experienced elementary school teacher who was taking graduate work in psychology at the University of Delaware.

Teacher characteristics were measured during two week-long training sessions held at the University of Delaware prior to the start of the Head Start program at the Centers. The tests were administered by the project director in his role as a director of the training program.

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Samples

Head Start Sample. The students tested comprised somewhat more than two-thirds of all those involved in the Delaware Head Start program. The pretest of the Self-Social Symbols instrument was given to 978 children during the first two weeks of their respective centers' programs. The posttest was given to 840 of those pretested and to an additional 105. The average number of students given both the pre and posttests was approximately nine for each class group. For purposes of this report, the number of students was reduced by eliminating those of teachers who either had not participated in the teacher training program or had not completed all the tests administered during that program. This sample is reported in Table 1.

TABLE 1

HEAD START ENROLLED CHILDREN OF FULLY TRAINED AND TESTED TEACHERS GIVEN BOTH PRE- AND POST-TESTS OF THE SELF-SOCIAL SYMBOLS TASKS

(N = 770)

Male		Female		Age			
White	Negro	White	Negro	Four	Five	Six	Seven
129	239	106	296	25	325	385	35
(16.7)	(31.2)	(13.7)	(38.4)	(3.2)	(42.2)	(50.0)	(4.6)

Control Sample. The one hundred controls for the Head Start student group were selected by the twelve field testers with the advice and assistance of Center administrators. Many of the controls were children not enrolled in Head Start because of lack of Center capacity while others were domiciled too far from the Centers. Twenty-four were from rural homes, the balance from the Wilmington-Newark urban-suburban area. Economic indicators similar to those prerequisite to Head Start were used, although the income criteria was often subjectively ascertained by the field testers. These children were tested in their homes during the same time periods Head Start children were tested. The control sample is reported in Table 2.

TABLE 2

HEAD START CONTROL SAMPLE GIVEN BOTH PRE- AND POST-TESTS OF THE SELF-SOCIAL SYMBOLS TASKS

(N = 100)

Male		Female		Age			
White	Negro	White	Negro	Four	Five	Six	Seven
27 (27.0)	40 (40.0)	12 (12.0)	21 (21.0)	19 (19.0)	46 (46.0)	31 (31.0)	4 (4.0)

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Teacher Sample. Of 94 teachers in the Delaware Head Start program, four did not participate in the training program and hence were not tested. Two of the trained and tested teachers dropped out of the program during the first two weeks. In addition, although present for most of the training, four were absent for several of the tests administered during the training period. Thus, 84 (or 91 percent) of the teachers who participated for the full term in Delaware Head Start were available for analysis.

Social Trust Sample. The sharing task measuring social trust was administered to 80 pairs of children during the first two weeks of the Head Start program and to 20 pairs during the last two weeks. In the pretesting, 40 pairs were racially homogeneous, half white and half Negro. In addition 40 pairs were racially mixed. In the posttest, 10 pairs were racially homogeneous and 10 pairs racially mixed. These children were randomly selected from Head Start Centers in the Wilmington-Newark area.

Research Design

Since we have experimental and control groups with pretest and posttest scores but without pre-experimental sampling equivalence, the research design is called by Campbell and Stanley (1963), a 'nonequivalent control group design,' a quasi-experimental design. This design differs from the classical pretest-posttest control group design in that we are dealing

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with intact experimental groups, the Head Start Center classes, which are self selected and a control group which may be widely divergent. With this design a covariance analysis using pretest means as the covariate is suggested (Campbell & Stanley, 1963) and since students were chosen randomly from Head Start classes for purposes of analysis, class means were not used as error terms but the usual Fisher-type analyses followed.

In determining the effect of teacher characteristics, a similar analysis was utilized.

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II INSTRUMENTS, PROCEDURES AND RELATED RESEARCH

Measurement of Self-Social Constructs

The major instrument used to measure self and self-other relationships was a version of the Self-Social Symbols Tasks (Ziller, Alexander, & Long, 1964). A theoretical framework for the Self-Social Symbols Tasks was derived from the works of Mead (1934), Freud (1949), Sullivan (1953), Kelly (1955), Osgood, Suci, & Tannenbaum (1957), and Kuethe (1962). One basic assumption of the framework is that interpersonal experiences serve to define the self. And as a transactional converse, the concept of self, as a socially devised element, is assumed to act as a perceptual agent through which experience is translated for assimilation. As Ziller, _et al_. (1964: 3) state:

> A fundamental assumption of the theory is that self-other relations and self delineation is a universal and constant concern. Self delineation is imposed by environmental demands. Information concerning the self facilitates anticipation and adjustment to future events. Still, information seeking relevant to the self may vary among individuals...Thus it is proposed that the self is necessarily defined in relation to concrete referents in the immediate social environment.

In discussing the relationship between the theoretical framework and the operational development of the instrument, Ziller _et al_. (1964: 22) point out:

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> Consistent with the theoretical framework, the Self Social Symbols Tasks were developed on the basis of two principles: (a) the tasks require the subject to relate himself to the social environment; (b) the tasks be primarily nonverbal in character. The desirability of this latter requirement of measures of personality has been noted by Guilford (1959). Of course too, the increased utility of the instrument across language barriers is an additional advantage of the nonverbal or a minimally verbal approach to personality assessment. Attempts to utilize a nonverbal approach for the description of the self concept have been rare if not nonexistent. In a recent survey of the literature by Ruth Wylie (1961) no references to nonverbal approaches were noted.

From the primary instrument, eleven tasks were selected on the basis of ease of task decision and degree of nonverbal involvement since the population to be measured consisted of preschool children.

Task 1. Quite frankly a heuristic extension of Task 8, Task 1 presumably measured some aspect of self esteem by having the child place five unmarked blocks on top of one another choosing one as self. The instructions for this task were:

> Here are some blocks. Now make believe that these blocks are people like your mother (touch a block), your father (touch another block), maybe a friend (touch another block), or maybe a brother or sister (touch another block). One of these blocks is you. That's right, you (point). All right, now make a tall pile out of these blocks by placing one on top of the other, like this (pile one on top of the other and remove it again). Now, point to the block that is you. That's right, pretend one of the blocks is you. Which one is you?

Scores ranged from 1 to 5 with 1 for the top block, "highest" in self esteem.

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Task 2. As a measure of identification with mother, the child was asked to symbolically place himself beside her. The instructions for this task were:

> Now here is a sticker. See how it sticks (show them). Look, there is a circle on the paper. Now make believe that the circle on the paper is your mother (point to the circle). Take a red sticker. Make believe that the red sticker is you (point at him or her). Now lick the sticker. The sticker you just licked is you. Now place you or yourself anywhere on the paper. Place the sticker anywhere on the paper that you wish (sweep the sheet with your hand).

This task was scored by measuring the distance between child-mother symbols in centimeters with an indirect relationship between strength of identification and distance posited. This measure follows Heider's (1958) suggestion that when a person indicates two objects "belong together," it may be assumed a concept relates them and with Parson's (1955) definition of identification as the placement of the self in a "we" category. Measures of this type involving a variety of subjects were found in earlier research (Ziller & Long, 1964) to be significantly related to each other while test-retest coefficients based on an elementary school sample ranged from 0.28 to 0.63.

In their discussion of identification, Ziller *et al*. (1964: 18) state:

> Psychoanalytically oriented theories of personality propose that the introjection of the generalized other is the basis of social development as well as the development of a functional self concept.

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> George Mead (1934) adopted this viewpoint but extended it to suggest the greater probability of stability and adjustment under conditions of multiple identification. Of particular concern is identification with parents. The parents serve as the first model of human behavior for the child.

Task 3. Identification with teacher was determined by having the child symbolically place himself beside her. The instructions for this task were:

> Now look at the next page. There is a circle on this page (point to it). Make believe that this circle on the paper is your teacher (point to the circle). Take up another red sticker. Make believe that this red sticker is you (point at child). Lick the sticker. Remember that the sticker that you just licked is you. Now put the sticker any place on the paper that you wish (sweep hand across the sheet of paper). All right, we are doing fine. Let's see what is on the next page.

The theoretical basis and operational development for this task is the same as for Task 2.

Task 4. Identification with father was determined by having the child symbolically place himself beside him. The instructions for this task were:

> There is a circle on this page (point to it). Make believe that this circle (point to it again) is your father. Take up a red sticker. Make believe that this red sticker is you. Lick the back of the sticker and stick it any place on the paper. Remember that this sticker is you.

The theoretical basis and operational development for this task is the same as for Task 2.

Task 5. As a measure of self centrality, the child was asked to place himself and a friend on a blank sheet of paper. The instructions for this task were:

> Turn the page. Here we will need two stickers. This red sticker is you (point to the red one); and this gold sticker (pointing to the gold one) is a boy or girl that you like. The gold sticker is someone who is your friend (point). First stick the red sticker on the paper. The red sticker is you. Then stick the gold sticker on the paper. The gold sticker is your friend. First, stick the red sticker; then stick the gold sticker.

The location of the self in the more central position on the paper was presumed to depict symbolically the focal orientation of self with regard to others. That is, the question of inward-outward directionality of the self is operationally defined in terms of whether the individual defines the self in terms of others or defines others in terms of self. Either the self or significant others may be perceived as figure or ground. The self symbol placed more centrally on the page was scored one while the friend symbol placed more centrally was scored two. In a previous study Ziller, et al., 1964) "popular" students placed themselves less frequently in the center than did less "popular" students. Cartwright (1961) has reported that therapy patients as opposed to normals made more references to themselves in relation to others. Ziller & Long (1964) proposed that under open group conditions, when the social environment is constantly changing, self, rather than others, evolves as a social point of reference. This notion was supported when highly mobile children obtained a significantly higher centrality score than did non-movers.

Task 6. As a measure of individualism with respect to significant adults, the child was asked to place himself symbolically with reference to a triangular placement of mother, father, and teacher symbols. The instructions for this task were:

> Here is another red sticker. Make believe the red sticker is you (point). Now look at the next sheet of paper. See the three circles. This one is your mother (point to top circle). This one is your father (point to middle circle). And this one is your teacher (point to bottom circle). Now lick the back of the red sticker. Remember the red sticker is you. Now place yourself anywhere on the paper.

Location of self within rather than without the triangle is assumed to be related to dependence upon social structure. Since the area outside the equilateral triangle is larger, there exists greater opportunity for a self definition less bounded by the three social points of reference. Ziller *et al*. (1964) report that less popular children (based on sociometric indices) located self more frequently inside the imaginary triangle than did popular

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children. In another study, Ziller and Long (1964) report that a significantly higher proportion of high mobile children placed self within the triangle than did non-movers. Long, Henderson, & Ziller (1964) reported a significant effect for grade level and dependence. The highest degree of dependence, placement of self within the triangle, was found in the sixth grade with the least in the first grade.

A second measure of dependence, consisting of choices between 'alone" and "group" participation in a number of activities, confirmed this finding of less independence at the upper grades. Long *et al*. (1964) suggest that these findings reflect the increased degree of socialization in the older child. They cite Kuhn's (1960) findings of greater identification with social groups with increased age between the ages of seven and twenty-four to support their interpretation. The increase of group activities as the child grows older is also probably part of the explanation.

Task 7. As a measure of individualism with respect to peers, the child was asked to place himself symbolically with reference to a triangular placement of three peers. The instructions for this task were:

> Here are three more circles. Make believe that this little circle is a *little boy* that you know (point). Make believe that this (point) circle is a *little girl* that you know. And make believe that this (point) is *another friend of yours*. Now, this *red* sticker is *you*. Lick the back of the sticker and stick it any place on this paper. Remember this sticker is you.

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The theoretical basis and operational development for this task is the same as for Task 6.

Task 8. On one of five vertical circles, as with the five blocks in Task 1, the child symbolically placed himself as a measure of self esteem. The instructions for this task were:

> Here are some little circles (point). Now make believe that these circles are people like your mother, your teacher, a friend, and someone you do not like very much. One of these circles is you (point). Now point to the circle that is you.

Scores ranged from one to five with one association with the top circle "highest in self esteem". In discussing self esteem, Ziller *et al.* (1964: 15-16) state:

> Self esteem is but a special case of self-social power relations, but is retained as a component because of the relative significance of this aspect of power orientation. Self esteem concerns that facet of the self concept wherein the individual attempts to evaluate the concept of self as he knows it or the salient aspects of the self as he selects them. This aspect of the self has attracted a large number of investigators (Wylie, 1961) but the results have been largely disappointing.
>
> Previous investigators have assumed that acceptance of self and acceptance of others are associated (Berger, 1952; Fey, 1955; Phillips, 1951). This approach suggests that within some larger social context, the self and some generalized others are evaluated similarly. It is the nature of the generalized other, however, which may introduce wide variations in response. For the individual who accepts himself to a high degree, the generalized others may be very different persons than those whom the less self-accepting individual envisions. It is proposed here that self esteem is an evaluation of the self in relation to significant others.

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> A power orientation is implied. The perceiver orders himself in relation to significant others which may include a friend, mother, father, or the most successful person they know. These significant others provide a personal frame of reference within which the self is evaluated. Thus, it is proposed that self acceptance and acceptance of others are inextricably related. The indices define each other in interaction.
>
> In addition, however, since evaluation of self and others are not independent, a high or low acceptance of self introduces complications with regard to the location of acceptance of others. Thus, high acceptance of self allows less opportunity for a higher acceptance of certain significant others. Thus lower evaluation of others will, in turn, have implications for other's perception of the self. A low self regard, on the other hand, permits a higher ordering of significant others (assuming a mutually exclusive linear ordering). In the latter event, if this perceptual ordering is communicated to the others consciously or otherwise, the other's behavior with regard to self may take one of at least two significant courses. The other individual may accept the superior regard and reinforce the perception by accepting the positive evaluation. On the other hand, the superior evaluation may not be accepted and the positive evaluation denigrated. In the first instance, the self esteem of the evaluator is positively reinforced; in the latter, it is reduced.

In operational support of their position, Ziller et al. (1964) report that students from academically superior class sections placed themselves in higher positions significantly more often than did students from sections representing less ability.

Task 9. As a measure of a self social power relationship with a teacher figure, the child was asked to symbolically place

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the teacher in one of eight circles surrounding a circle representing himself. The directions for this task were:

> Look at all the circles. Make believe that these circles are people. The circle in the center is you. Now make believe that one of these circles (point) is your teacher. Which circle do you think is your teacher? Put your finger on the circle that is your teacher.

Scores ranged from one to five with one at the 12 o'clock position, two at the 11 and 1 o'clock positions, three at the 9 and 3 o'clock positions, four at the 7 and 5 o'clock positions, and five at the 6 o'clock position. Self power scores thus ran from a high of five to a low of one. In their discussion of power, Ziller *et al*. (1964: 13-14) state:

> Comparisons among self and others has been assumed to be the basis of self definition. If the search for self definition is sufficiently intense and extensive, a comparison is required of self and others in terms of some ordering with regard to a given dimension having an evaluative component. One of the significant dimensions of such comparisons is power.
>
> The study of interpersonal relations with regard to power orientations is central to the personality theories of Adler (1927) and Horney (1937). Adler proposed that the "will to power" was more significant than sexuality in understanding interpersonal behavior. In his framework the striving for superiority and conquest was fundamental to security and the pleasure principle. Similarly, Horney includes the neurotic need for power for its own sake as one of the ten basic irrational solutions to disturbances in human relationships.
>
> In a sense, the perception of the self as consistently superior or inferior to others may be interpreted as a dynamism; that is, as a search for an

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> inviolable social position for the self. Horizontal status relations presents opportunities for exposure of the self to social criticism. Vertical relationships with others in which the self either subordinate or superior offers a patent structure to social relations and avoids the necessity of constantly comparing self and others; that is, a linear hierarchical ordering presents a simple structure of complex social interaction.

In reporting research concerned with this task, Ziller et al. (1964) show that popular students placed the teacher in the diagonal or horizontal position significantly more often than did less popular students, suggesting a more egolitarian orientation with regard to the teacher. High mobile Air Force children placed the father in a less powerful position with regard to self than did nonmobile children (Ziller & Long, 1964). Long, et al. (1964) report an earlier study in which eighth graders placed teacher in a significantly higher position than they placed friend. Test-retest reliabilities of 0.49 for teacher and 0.87 for father were found for this task.

Task 10. As a measure of self-social power with a police figure, the child was asked to symbolically place the policeman in one of eight circles surrounding a circle representing himself. The directions for this task were:

> Here are some more circles. Make believe that these circles are people. The circle in the center is you. Now make believe that one of the other little circles around here (point) is a policeman. Which circle do you think is the policeman? Put your finger on the circle that is a policeman.

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The operational basis and operational development for this task is the same as for Task 9.

Task 11. In order to measure self differentiation within a social field, the child was shown a large circle with a number of small circles within and told to select one as self. Two out of the ten small circles were crosshatched. The instructions for this task were:

> Now look at all the little circles on this paper (point). Make believe that these circles are children or kids. These children are about as old as you are and as big as you are. Now one of these little circles or children is you. Which one do you think is you? Put your finger on the circle that is you.

Choice of the self referent object as different from the majority of objects in the field was coded as a unit of individuation. Choice of the self referent object as similar to the majority of objects in the field was coded as a unit of de-individuation. This decision was made with great reservation, however, in view of the theory which suggests that persons with less well-delineated self concepts may fear further loss of identity in a group. If so, individuation may be associated with the choice of a self referent symbol similar to the majority of symbols. Thus the task is somewhat exploratory. In their discussion of individuation Ziller et al. (1964: 4-5) state:

> Individuation is defined as a person's subjective mapping of the social field in which self is diffenentiated to a greater or lesser degree from the

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> other social objects in the field. Although individuation is subjective in nature, objective conditions are presumed to influence the person's sense of individuation. Thus, it is proposed that individuation varies inversely with the number of bits of information necessary to locate the person or himself unequivocally within a group; that is, the fewer the number of bits of information required to locate the person, the greater the degree of individuation. For example, if it is known that one male and five females are in an adjoining room, the male is said to be more individuated than any one of the females; only one bit of information "male" is required to locate that person without error.
>
> The previous example locates the source of differentiation as external to the individual. A stimulus-response loop is proposed, however, between the individual and the environment. Thus, differentiating experiences in early development periods, such as being an only son, become integrated with the self concept which in turn interacts with succeeding environmental presses including group experiences.
>
> The concept of individuation derives, in part, from Erikson's (1959) postulated basic need for "ego identity." In the present framework, however, the self-other contradistinction is emphasized. It is proposed that under conditions of ego diffusion, the individual has difficulty distinguishing his uniqueness; contrasts and similarities between the self and others fail to be perceived and lead to an amorphous, diaphanous, or obscured self portrayal. Moreover, it is proposed here that ego identity underlies the conflict between the need for dependence and the need for independence which is a basic assumption in a number of social psychological theories of personality (Rank, 1936; Murray, 1938; Ausubel, 1952; Levy, 1955; Harvey, Hunt, & Schroder, 1961).

High mobile children selected the different circle to represent themselves more frequently than low mobile children (Ziller & Long, 1964), suggesting that successive experiences with varying groups of others apparently produces a highly differentiated

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self. In another study (Long, et al., 1964), a positive relationship was found between grade in school and individuation supporting the notion that cumulative experiences of confrontation of self with groups of others increases the individual's sense of his own uniqueness.

This task was found to have internal consistency correlations ranging from 0.36 to 0.63 all significant at the 0.01 level or less. Test-retest reliability (tetrachoric coefficient) was 0.64 (Long, et al., 1964).

Although there was a Task 12 in the booklet, it was exactly the same as Task 11 except that the majority of small circles was crosshatched with two of them left unmarked.

It was discovered that once the children made their choice on Task 11 of either plain or crosshatch circles, this decision was carried over to Task 12. This perseveration negated all assumptions concerned with individuation so that Task 12 was not included in the analysis.

Measurement of Trust

In addition to research on the development of self-social constructs of Head Start children, the development of trust was also measured. Social trust or trusting behavior (Deutsch, 1958) consists of choosing an action with both beneficial and harmful effects, dependent on the behavior of another person, when it is perceived that the harmful consequences are greater than the beneficial ones. As an operational measure of social trust, a sharing task (Wright, 1942; Ugurel-Semin, 1952; Handlan and Gross, 1958) was given to a selected sample of Head Start children. The procedure for this task was essentially that a pair of children would be taken from their classroom by an experimenter to an experimental room. Five "Tootsie Rolls" were arranged radially on an empty table. The experimenter stated that the Tootsie Rolls were to be shared by the first child with the second child after the experimenter and the second child left the room, i.e., without supervision. The second child was taken to another table outside the room where another five Tootsie Rolls were put out for him to share with the first child, in the presence of the experimenter. When the second child had shared, the experimenter ascertained that the first child was also finished, then the second child was allowed to return to the experimental room. A direct exchange was made between the children, each giving the other one the Tootsie Rolls he had decided to share with the other.

A number of analyses were made utilizing this task and are reported in Chapter III.

Measurement of Conceptual Systems

Several studies have indicated a relationship between the conceptual organization (Harvey, Hunt & Schroder, 1961) of teachers and their ability to help children define and advance problems (Joyce, 1964), and their ability to handle information about children (Joyce, Lamb, & Sibol, 1964). According to a conceptual systems theory developed by Harvey, Hunt & Schroder (1961: 1):

> An individual interacts with his environment by breaking it down and organizing it into meaningful patterns congruent with his own needs and psychological make-up. As a result of this interchange, perceptual and behavioral constancies develop which stem from the individual's standardized evaluative predilections toward differential aspects of his external world.

These tendencies are referred to as concepts. They are the "connecting ties between the individual and his environment." (Harvey, et al., 1961: 1)

"In more concrete functioning, the mediating link between input and output is more fixed." (Harvey, et al., 1961: 1) Development toward abstractness "assumes an increased availability of alternative concepts, a schemata for coping with the same stimuli. Thus, as progressive development occurs, the person orders the world more relativistically and less stereotypically. In other words, he operates in terms of multiple alternatives rather than in terms of bifurcated black-white categories." (Harvey, et al., 1961: 4)

In the study by Joyce (1964), the conceptually more abstract teachers helped children define and advance problems while the more concrete teachers did not. In addition, more abstract teachers were more integrative in their contacts with children. Joyce, Lamb & Sibol (1964) found that abstract teachers took more definite positions on diagnosis and treatment as they received more information about a student case, while concrete subjects did not increase their certainty from their initial position based on little information. From these studies it seemed worthwhile to investigate the possible differences children would show on the pre-school Self Social Symbols Tasks as a result of having abstract or concrete teachers.

An Essay Problem test developed by Lamb (Weinberg, Lamb, & McHugh, 1964) was used to determine the conceptual style or level of the teachers and can be found in Appendix B. Essentially, the subject is asked to discuss the topic "Rules" according to guidelines which themselves increase in conceptual complexity.

A scoring system, also found in Appendix B, was derived from the revised Manual for Assessing the Integrative Complexity of Conceptual Rules Producing Verbal Responses (Schroder, Driver & Streufert, 1964). In general the more closely and completely a subject could follow the Essay Problem directions a higher score he received. Scores can range from 1.0 to 7.0. Rater reliability was between 0.80 and 0.95.

Measurement of Self Complexity

As an adjunct measure of complexity, teachers were asked to choose those adjectives which described themselves from a word list which can be found in Appendix C. The number of adjectives checked presumably indicates self complexity. Support for this technique comes from the results of a study by Sarbin and Jones (1955). It was found that the subjects who checked more adjectives describing themselves revealed higher ego strength on Barron's scale (1952).

Measurement of Perception of Disliked Students

The teacher's perception of marginal members of the academic group is highly related to the marginal child's performance (Ehart, 1956; Ziller, 1963). In these studies, as in this one, a variation of Fiedler's (1960) assumed similarity indices were employed. In the former studies, it was found that in the early elementary grades and particularly in schools with a high percentage of underprivileged children, the most successful teachers were less severe in their adjectival descriptions of the least preferred student. The instrument can be found in Appendix D. Scoring was based on positive adjectival descriptions.

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Measurement of Attitude Toward the Poor

As a part of the national study, an Operation Head Start Workers Attitude Scale was given before training, after training, and several times during the Head Start operation. Using a scoring system developed by Lamb and Barbe (project consultant) which can be found in Appendix E, a general score on Part I was determined for all teachers on their post-training test which presumably measures a respondent's positive perception of the poor with little or no differentiation on those characteristics which appear to be stereotypical and negativistic.

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III ANALYSIS OF RESULTS

General Statistical Procedures

Data Treatment. All Self-Social Symbols Tasks test results were scored by teams of testers; a random ten percent was independently rescored only to find minute original scoring error. Scores were then transcribed on tabulation sheets for keypunching, and different personnel checked a random twenty percent of the transcriptions; blocks of these and the original checked, rescored, and newly transcribed if any errors were found. Manually derived totals were independently checked in toto.

Three IBM 26 Keypunch operators reduced the transcribed scores to IBM cards; printouts were spotchecked against the tabulation sheets and a random ten percent was checked against the original scored test instruments. In addition, cards were sorted for each task, ranked by score and printed out, and all scores found to be out of defined ranges were checked against the original test instruments and revised accordingly. A simple frequency distribution program was used in an IBM 1620 computer and a test run of a descriptive statistics program on an SDS 9300 computer were used to proof out revised and duplicated data cards.

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Data card printouts were further compared with manual tabulations of data on groups of students for individual teachers and for individual Head Start Centers: N of students, ages, race and sex of students on the IBM cards were thus verified.

Data for the Sharing Task was manually calculated, all by principal tester; age, race and sex data were cross-verified with that for the Self-Social Symbols Tasks where there was a coincidence of students tested.

Scoring of teacher test responses was done by two research assistants. Transcription, keypunching and verification proceeded in much the same manner as with the student tests. Teacher scores were initially summed and means found by the use of the IBM 407 Accounting Machine; modes and medians by the use of the IBM Card Sorter and subsequent IBM 407 printouts.

Multiple-regression, co-variance, and analysis of variance programs were adapted to the SDS 9300 from the MULTR, COVAR, and ANOVA programs contained in Cooley and Lohnes: Multivariate Procedures for the Behavioral Sciences (Wiley, New York, 1962). Formulae and processes can be directly ascertained by reference to the programs in Cooley and Lohnes. Other programs for the 9300 and all for the IBM 1620 were developed locally.

Statistical Analysis. In general, analyses of covariance (ANOVA) were used to determine the significance of differences

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both in the Head Start versus controls on all tasks as well as between Head Start students of teachers one-half standard deviation above or below the means on characteristics of conceptual style, self-complexity, perception of disliked students and attitude toward the poor.

For those tasks where nonparametric statistics were appropriate (five, six, seven and eleven) student responses, as frequencies, were cast into McNemar's (1955) categories for determining significance of change. A chi^2 test for independent samples was first computed. If significant, then McNemar's test was applied to each group to determine significancies of change.

Development of Self Social Constructs

Statistically Significant Measurements

Two of the eleven tasks differentiate at statistically significant levels between the Head Start children and the control group. On an F distribution, a .05 level of significance was established for Task 3, Identification with Teacher ($F = 4.26$). On a chi^2 test of independent samples, a .01 level of significance was established for Task 11, Individuation ($X^2 = 11.32$).

Relevant statistics are given in tables which follow the conclusion of this section and introductory comments concerning remarkable differences, not significant, which immediately follow this section.

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Task 3 -- Identification with Teacher. Controls moved from a pretest mean of 38.83 to a posttest mean of 15.86, S.D. 28.37, a change, after adjustment for pretest differences of the respective group from the grand means, of -13. Students, on the other hand, moved from a mean of 27.55 on the pretest to a mean of 21.46, S.D. 31.31, on the posttest, a change after adjustment of -6. Pretest grand mean was 27.75, posttest grand mean 20.60, responses being on a scale of 0 to 200 millimeters.

Task 11 -- Individuation. While 62% of the students showed no change in response to this task from pre- to posttesting, 72% of the controls repeated their original response. A comparable proportion, 20%, of both the students and the controls moved toward a higher individuation, but over twice as high a proportion of the students, 18%, as controls, 8%, evidenced a shift toward lesser individuation.

Remarkable Differences between Students and Controls

Analyses of variance of the eleven Self-Social Symbols Tasks, comparing cells of the students and controls, yielded results which although not significant, do point to measured effects of the program about which tentative remarks can be made.

Task 1 -- Self Esteem -- Table 3. Controls generally showed a shift toward lower self-esteem, the change (from a raw pretest mean score to a mean posttest score adjusted for the difference of the pretest score from the grand mean pretest score) being +.23.

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Table 3

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 1: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

CONTROLS	STUDENTS	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		1.62	1.80	1.85	+.23	1.26
	All	1.87	1.77	1.77	-.10	1.31
Female White		1.42	1.33	1.43	+.01	
	Female White	2.05	1.58	1.53	-.52	
Female Negro		1.55	1.35	1.42	-.13	
	Female Negro	1.95	1.64	1.61	-.34	
Male White		1.54	2.00	2.07	+.53	
	Male White	1.87	1.98	1.97	+.10	
Male Negro		1.77	2.05	2.06	+.29	
	Male Negro	1.77	1.78	1.80	+.03	
Females	Females	1.91	1.57	1.55	-.36	
Males	Males	1.79	1.88	1.89	+.10	
Whites	Whites	1.86	1.83	1.83	-.03	
Negroes	Negroes	1.81	1.75	1.75	-.06	
Grand Means		1.83	1.78		-.05	
Adj. Coef.		.23				

In contrast, students showed a slight shift in the opposite direction, the mean change being -.10.

Male controls evidenced the greatest shift toward self-esteem, the white and Negro males respectively changing +.53 and +.29; the comparable student cells changed only +.10 and -.03. Female students showed a marked shift toward higher self-esteem, whites and Negroes changing -.52 and -.34, the comparable controls changing +.01 and -.13.

Task 2 -- Identification with Mother -- Table 4. Changes calculated with adjustment for pretest score differences were virtually identical for controls and students as a whole, although the levels of the mean scores were of some difference. The greatest change was evidenced by the female white students, averaging -17, the comparable controls averaging a change of +4.

Task 3 -- Identification with Teacher -- Tables 5 and 5a. The significant difference between controls and students having been commented upon earlier, the cells contributing most to this difference are worth discussing. The male controls evidenced the greatest degree of change, white controls changing -17 and Negro controls -16, in contrast to female students of both racial groups changing an average of -5. In total, however, there was no remarkable difference between either sex or racial groups.

Task 4 -- Identification with Father -- Tables 6 and 6a. The only remarkable difference noted was a slight change, from pre- to

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Table 4

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 2: IDENTIFICATION WITH MOTHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

CONTROLS	STUDENTS	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S. D.
All		22.73	12.75	13.95	-8	25.41
	All	26.90	18.18	17.97	-8	28.92
Female White		17.83	19.00	21.86	+4	
	Female White	33.55	18.86	16.39	-17	
Female Negro		21.75	9.70	11.23	-10	
	Female Negro	28.55	16.58	15.81	-12	
Male White		23.62	14.29	15.18	-8	
	Male White	29.60	21.80	20.67	-8	
Male Negro		24.15	11.47	12.19	-11	
	Male Negro	22.45	16.61	17.90	-4	
Females	Females	28.86	16.78	15.90	-12	
Males	Males	24.95	17.63	18.07	-6	
Whites	Whites	29.50	20.06	18.96	-10	
Negroes	Negroes	24.31	15.72	16.38	-7	
Grand Means		26.25	17.35		-8	
Adj. Coef.		.34				

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Table 5

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 3: IDENTIFICATION WITH TEACHER

RANGE: 0(CLOSE IDENTIFICATION) to 100 (DISTANT IDENTIFICATION)

CONTROLS	STUDENTS	Mean Scores Pre Test	 Post Test	Adjusted Post Test	Change	S D
All		28.83	15.86	15.4[illegible]	-13	28.37
	All	27.55	21.46	21.53	-6	31.31
Female White		23.75	10.83	12.27	-11	
	Female White	31.29	25.59	24.31	-6	
Female Negro		21.30	16.15	18.47	-2	
	Female Negro	28.20	20.72	20.55	-7	
Male White		32.17	16.54	14.95	-17	
	Male White	27.78	22.64	22.62	-5	
Male Negro		32.12	16.82	15.25	-16	
	Male Negro	25.96	19.89	20.54	-5	
Females	Females	28.26	21.25	21.07	-7	
Males	Males	27.49	20.27	20.37	-7	
Whites	Whites	29.01	22.24	21.78	-7	
Negroes	Negroes	26.98	19.62	19.89	-7	
Grand Means		27.75	20.60		-7	
Adj. Coef.		.36				

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Table 6

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 4: IDENTIFICATION WITH FATHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

CONTROLS	STUDENTS	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		24.95	16.87	17.57	-7	36.50
	All	27.43	20.18	20.06	-7	31.70
Female White		15.75	17.33	21.07	+5	
	Female White	29.82	20.89	19.98	-9	
Female Negro		23.05	12.50	13.82	-9	
	Female Negro	31.65	28.77	27.25	-4	
Male White		28.33	21.75	21.32	-7	
	Male White	27.35	18.45	18.35	-9	
Male Negro		26.62	16.00	16.14	-10	
	Male Negro	24.65	16.72	17.51	-7	
Females	Females	29.33	24.05	23.29	-6	
Males	Males	25.91	17.49	17.87	-8	
Whites	Whites	27.55	19.42	19.25	-8	
Negroes	Negroes	26.74	19.83	19.93	-6	
Grand Means		27.05	19.67		-7	
Adj. Coef.		.33				

posttest scores, of female white controls toward less identification with father (+5) while the comparable student group showed a change toward closer identification (-9).

Task 5 -- Centrality -- Tables 7 and 7a. Mean scores suggest a tendency of the students to persist more than the controls in maintaining self as central; frequencies of shifts or persistencies fail to suggest even the least remarkable difference between students and controls on this task.

Task 6 -- Identification with Adults -- Table 8. Mean scores and the frequency count both indicated a lack of difference between students and controls as total groups (each changing a mean of -.10) but as with Task Four, female white controls moved, on the average, slightly toward less identification with adults (+.02) while the comparable student cell showed an above the general average move toward closer identification (-.26).

Task 7 -- Identification with Peers -- Table 9. Again, mean scores and the frequency count failed to suggest any remarkable difference between controls and students, but the cell means for female whites showed a +.04 change in the case of the controls, a -.16 change in the case of students; these changes can be compared with the grand means change of -.12.

Task 8 -- Self Esteem -- Table 10. Controls generally tended to change more (-.82) than students (-.28), both in a direction toward higher self-esteem. Most remarkable cell mean was the -.15 average change of male Negro students, the least change of any cell.

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Table 7

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 5: CENTRALITY

ALTERNATIVES: 1 (SELF IS CENTRAL) or 2 (FRIEND IS CENTRAL)

CONTROLS	STUDENTS	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.39	1.47	1.47	+.08
	All	1.39	1.42	1.42	+.03
Female White		1.50	1.42	1.42	-.08
	Female White	1.38	1.44	1.44	+.06
Female Negro		1.35	1.40	1.40	+.05
	Female Negro	1.35	1.34	1.34	-.01
Male White		1.42	1.54	1.54	+.12
	Male White	1.40	1.45	1.45	+.05
Male Negro		1.35	1.47	1.47	+.12
	Male Negro	1.41	1.43	1.43	+.02
Females	Females	1.37	1.38	1.38	+.01
Males	Males	1.40	1.45	1.45	+.05
Whites	Whites	1.40	1.46	1.46	+.06
Negroes	Negroes	1.38	1.41	1.41	+.03
Grand Means		1.39	1.42		+.03
Adj. Coef.		.00			

PRE TO POST RESPONSE	CONTROLS	STUDENTS
Shifted 1 to 2	28	189
Stayed 1 to 1	35	287
Stayed 2 to 2	18	128
Shifted 2 to 1	19	166

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Table 8
HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 6: IDENTIFICATION WITH ADULTS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

CONTROLS	STUDENTS	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.48	1.39	1.38	-.10
	All	1.47	1.37	1.37	-.10
Female White		1.42	1.42	1.44	+.02
	Female White	1.58	1.36	1.32	-.26
Female Negro		1.50	1.40	1.39	-.11
	Female Negro	1.49	1.38	1.37	-.12
Male White		1.54	1.33	1.30	-.14
	Male White	1.48	1.39	1.39	-.09
Male Negro		1.45	1.40	1.41	-.04
	Male Negro	1.41	1.35	1.37	-.04
Females	Females	1.51	1.38	1.36	-.15
Males	Males	1.44	1.37	1.38	-.06
Whites	Whites	1.51	1.38	1.36	-.15
Negroes	Negroes	1.44	1.37	1.38	-.06
Grand Means		1.47	1.37		-.10
Adj. Coef.		.39			

PRE TO POST RESPONSE	CONTROLS	STUDENTS
Shifted 1 to 2	12	82
Stayed 1 to 1	40	341
Stayed 2 to 2	27	198
Shifted 2 to 1	21	149

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Table 9

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 7: IDENTIFICATION WITH PEERS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

CONTROLS	STUDENTS	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.51	1.40	1.40	-.11
	All	1.53	1.41	1.41	-.12
Female White		1.42	1.42	1.46	+.04
	Female White	1.59	1.45	1.43	-,16
Female Negro		1.50	1.30	1.31	-.19
	Female Negro	1.56	1.41	1.40	-.16
Male White		1.58	1.50	1.48	-.10
	Male White	1.59	1.48	1.46	-.13
Male Negro		1.50	1.37	1.39	-.11
	Male Negro	1.46	1.36	1.39	-.07
Females	Females	1.56	1.41	1.40	-.16
Males	Males	1.51	1.41	1.41	-.10
Whites	Whites	1.58	1.47	1.45	-.13
Negroes	Negroes	1.49	1.37	1.38	-.11
Grand Means		1.53	1.41		-.12
Adj. Coef.		.39			

PRE TO POST RESPONSE	CONTROLS	STUDENTS
Shifted 1 to 2	11	73
Stayed 1 to 1	38	310
Stayed 2 to 2	29	235
Shifted 2 to 1	22	152

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Table 10

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 8: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

CONTROLS	STUDENTS	Mean Scores		Adjusted Post Test	Change	S D
		Pre Test	Post Test			
All		3.61	2.84	2.79	-.82	1.63
	All	3.16	2.87	2.88	-.28	1.67
Female White		3.42	2.67	2.64	-.78	
	Female White	2.97	2.73	2.77	-.20	
Female Negro		3.30	2.40	2.39	-.91	
	Female Negro	3.08	2.84	2.86	-.22	
Male White		3.67	3.17	3.10	-.57	
	Male White	3.29	2.73	2.72	-.57	
Male Negro		3.80	2.92	2.84	-.96	
	Male Negro	3.18	3.02	3.03	-.15	
Females	Females	3.09	2.75	2.77	-.32	
Males	Males	3.30	2.93	2.92	-.38	
Whites	Whites	3.24	2.77	2.77	-.47	
Negroes	Negroes	3.22	2.93	2.93	-.29	
Grand Means		3.23	2.87		-.36	
Adj. Coef.		.15				

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Task 9 -- Power with Teacher -- Table 11. Controls evidenced a higher degree of assertion of social position than did the Head Start students, the adjusted posttest means being 3.23 and 2.96 respectively.

Both control and student female whites stood out as having distinctly shifted toward higher student power from pre- to posttest, changing +.51 and +.25 respectively, and it should be further noted that the difference between them (a difference of change of .26) represents a greater one than the difference between controls and students in general (which was .16). There was less difference between the mean changes of female Negroes, controls and students (-.20, -.01), and male white controls and students (-.48, -.35), but a greater contrast between the changes effected by male Negro controls and students (-.35, +.01).

Task 10 -- Power with Policeman -- Table 12. The mean change of the controls on this task was -.39, while that of the students was only -.09. The differences among different sex-race cells of the controls were somewhat more pronounced than among the students, although the standard deviations of the two major groups, 1.34 for controls and 1.29 for students, were not far apart. Male white controls evidenced a mean change of -.64, comparable students only -.08; male Negro controls of -.33 in comparison with the male Negro mean change of +.02. Least control-

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Table 11
HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 9: POWER WITH TEACHER

RANGE: 1 (TEACHER MORE POWERFUL) to 5 (SELF MORE POWERFUL)

CONTROLS	STUDENTS	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		3.47	3.29	3.23	-.24	1.34
	All	3.04	2.95	2.96	-.08	1.38
Female White		3.08	3.58	3.59	+.59	
	Female White	2.83	3.03	3.08	+.25	
Female Negro		3.40	3.25	3.20	-.20	
	Female Negro	3.16	3.09	3.08	-.08	
Male White		3.67	3.29	3.19	-.48	
	Male White	3.02	2.65	2.67	-.35	
Male Negro		3.50	3.22	3.15	-.35	
	Male Negro	3.04	3.04	3.05	+.01	
Females	Females	3.08	3.12	3.12	+.04	
Males	Males	3.12	2.95	2.94	-.16	
Whites	Whites	3.04	2.87	2.88	-.16	
Negroes	Negroes	3.14	3.08	3.08	-.06	
Grand Means		3.10	3.00		-.10	
Adj. Coef.		.18				

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Table 12

HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 10: POWER WITH POLICEMAN

RANGE: 1 (POLICEMAN MORE POWERFUL) to 5 (SELF MORE POWERFUL)

CONTROLS	STUDENTS	Mean Scores		Adjusted	Change	S D
		Pre Test	Post Test	Post Test		
All		3.43	3.09	3.04	-.39	1.34
	All	3.03	2.93	2.94	-.09	1.29
Female White		3.42	3.25	3.20	-.22	
	Female White	2.88	2.89	2.93	+.05	
Female Negro		3.60	3.40	3.32	-.28	
	Female Negro	3.22	2.83	2.81	-.41	
Male White		3.46	2.87	2.82	-.64	
	Male White	2.87	2.76	2.79	-.08	
Male Negro		3.32	3.02	2.99	-.33	
	Male Negro	3.08	3.10	3.10	+.02	
Females	Females	3.16	2.93	2.92	-.24	
Males	Males	3.06	2.97	2.97	-.09	
Whites	Whites	2.96	2.83	2.85	-.11	
Negroes	Negroes	3.17	3.03	3.02	-.15	
Grand Means		3.09	2.96		-.13	
Adj. Coef.		.15				

student difference was between the mean change of female Negroes, controls changing an average of -.28 while students changed an average of -.41; female white controls changed least of the controls, -.22, the comparable student group +.05, which although a contrast in direction, represents a difference less than the mean difference between controls and students generally.

Task 11 -- Individuation -- Tables 13 and 13a. A chi^2 analysis of shifts from pre- to posttest responses showed, as indicated earlier, a significant difference on this task between the controls and the students; 478, or 62%, of the students, and 72, or 72% of the controls did not change their responses in the separate administrations of the instrument over six weeks, and 157, approximately 20%, and 20 of the 100 controls, likewise 20%, shifted from a "same" response originally to a "different" response on the posttest. The significant difference came between the 135 students, 18% of the 770, and the 8 controls, only 8%, who shifted in the opposite direction, from a "self different" to a "self same" response.

This difference was reflected in the ANOVA sampling and calculation of group means. The controls evidenced an average shift of +.13 from pre- to posttest, the students a lesser shift of +.02. A difference greater than this mean difference of change was noted in three of the four pairs of cells of controls and students. Female white controls changed a mean of +.19, comparable students

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Table 13
HEAD START STUDENTS AND CONTROLS

(N = 770, 100)

TASK 11: INDIVIDUATION

ALTERNATIVES: 1 (SELF SAME AS OTHERS) or 2 (SELF DIFFERENT FROM OTHERS)

CONTROLS	STUDENTS	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change
All		1.21	1.32	1.34	+.13
	All	1.35	1.37	1.37	+.02
Female White		1.17	1.33	1.36	+.19
	Female White	1.41	1.42	1.41	±.00
Female Negro		1.15	1.20	1.23	+.08
	Female Negro	1.34	1.29	1.29	-.05
Male White		1.29	1.37	1.38	+.09
	Male White	1.33	1.37	1.37	+.04
Male Negro		1.20	1.35	1.37	+.17
	Male Negro	1.36	1.40	1.40	+.04
Females	Females	1.33	1.33	1.33	±.00
Males	Males	1.33	1.39	1.39	+.06
Whites	Whites	1.34	1.38	1.38	+.04
Negroes	Negroes	1.33	1.36	1.36	+.03
Grand Means		1.33	1.37		+.04
Adj. Coef.		.17			

PRE TO POST RESPONSE	CONTROLS	STUDENTS
Shifted 1 to 2	20	157
Stayed 1 to 1	60	341
Stayed 2 to 2	12	137
Shifted 2 to 1	8	135

neglibibly; female Negro controls +.08, comparable students -.05; male Negro controls +.17, comparable students +.04.

Effect of Teachers' Cognitive Styles

Statistically Significant Measures

Task 2, Identification with Mother, was the only one of the eleven Self-Social Symbols Tasks which differentiated students of teachers of contrasting cognitive styles. However, teacher-sex and teacher-race interactions were significant.

On the Essay Problem, a measure of conceptual style, a mean score of 2.68, on a zero to seven scale, with a standard deviation of 1.05, was found. Analysis of variance of the tasks performed by students of teachers scoring more than a half a standard deviation above or below the mean score, respectively, yielded for Self-Social Symbols Task 2, Identification with Mother, a significant difference between the two groups of Head Start students. Those students whose teachers were in the high group on conceptual style, i.e., were distinctly more abstract, showed a pre- to posttest movement toward closer identification with mother, significant at the .05 level ($F = 6.27$), than students in the low group, i.e., the more concrete teachers. The comparison was made between the 234 pre- and posttested students of the 25 teachers scoring half a standard deviation above the mean against a similarly proportioned

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sample of the 270 pre- and posttested students of the 32 teachers scoring a half a standard deviation below the mean on the essay problem.

The students of the higher-scoring, or more abstract, teachers moved from a pretest mean score of 23.99 on Task 2 to a posttest score, adjusted for pretest differences, of 14.87, a change of -9.12. The students of the lower scoring, or more concrete, teachers moved from a pretest mean of 24.63 to an adjusted posttest mean of 21.42, a change of -3.21.

On the Word List, a measure of self-complexity, a mean score of 30.01 was found on a zero to fifty scale with a standard deviation of 11.05. Again, a difference significant at the .05 level was found (F = 3.90) between scores on Task 2 by students of teachers scoring high on the measure of self-complexity and students of teachers scoring low on this measure. The comparison was made between a proportioned sample of the 279 pre- and posttested students of the 31 teachers who scored more than half a standard deviation above the mean score on the teacher instrument and a similarly proportioned sample of the 227 pre- and posttested students of the 26 teachers who scored more than half a standard deviation below the mean score on the Word List given the teachers.

The students of the higher-scoring, or more complex, teachers moved from a pretest mean score of 26.25 on Task 2 to a posttest score, adjusted for pretest differences, of 17.25, a change of -9.00. The students of the lower-scoring, or less complex, teachers moved from a pretest mean of 25.09 to an adjusted posttest mean of 22.75, a change of -2.34.

Student performance on the eleven Self-Social Symbols Tasks, comparing students of teachers high and low on the cited measures of cognitive style, follow, with comments about other differences, some statistically significant and others worth remarking upon.

Task 1 -- Self Esteem -- Tables 14 and 15. Students of the more abstract teachers showed a mean change of -.08, those of the more concrete teachers of +.03, not a significant difference. However, a significant difference was observed between female white students of the two types of teachers: female white students of the more abstract teachers averaged a change of -.90, a distinct move on the 1 to 5 scale toward higher self-esteem, while the comparable cell of students of more concrete teachers averaged a change of +.19, a slight shift toward lower self-esteem.

The difference between students of more and less complex teachers was comparable for the gross groups: students of the more complex teachers showed a mean change of -.08, those of the less complex teachers a mean change of +.04. The difference between the two cells of female whites was not remarkable, nor were the differences between cells of Negroes of either sex. However, white male students of the more complex teachers showed a mean change of -.09, while white male students of the less complex teachers shifted +.67.

Table 14

STUDENTS OF MORE ABSTRACT TEACHERS
COMPARED WITH
STUDENTS OF MORE CONCRETE TEACHERS

TASK 1: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

ABSTRACT	CONCRETE	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		1.90	1.83	1.82	-.08	1.31
	All	1.76	1.78	1.79	+.03	1.33
Female White		2.40	1.60	1.50	-.90	
	Female White	1.64	1.80	1.83	+.19	
Female Negro		1.66	1.92	1.95	+.29	
	Female Negro	1.64	1.44	1.84	+.20	
Male White		1.76	1.82	1.83	+.07	
	Male White	1.97	2.12	2.10	+.13	
Male Negro		1.95	1.86	1.84	-.11	
	Male Negro	1.79	1.85	1.86	+.07	
Females	Females	1.77	1.69	1.70	-.07	
Males	Males	1.87	1.89	1.89	+.02	
Whites	Whites	1.93	1.85	1.84	-.09	
Negroes	Negroes	1.78	1.78	1.79	+.01	
Grand Means		1.83	1.80		-.03	
Adj. Coef.		.17				

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Table 15

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 1: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

MORE COMPLEX	LESS COMPLEX	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		1.83	1.76	1.75	-.08	1.23
	All	1.72	1.74	1.76	+.04	1.28
Female White		1.97	1.66	1.62	-.35	
	Female White	1.60	1.25	1.29	-.31	
Female Negro		1.81	1.71	1.70	-.11	
	Female Negro	1.80	1.57	1.56	-.24	
Male White		2.02	1.98	1.93	-.09	
	Male White	1.60	2.23	2.27	+.67	
Male Negro		1.67	1.69	1.72	+.05	
	Male Negro	1.80	1.76	1.75	-.05	
Females	Females	1.82	1.59	1.59	-.23	
Males	Males	1.77	1.86	1.86	+.09	
Whites	Whites	1.85	1.85	1.84	-.01	
Negroes	Negroes	1.75	1.69	1.70	-.05	
Grand Means		1.79	1.75		-.04	
Adj. Coef.		.19				

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Task 2 -- Identification with Mother -- Tables 16 and 17. Students of the more abstract teachers showed a mean change of -9.12, those of the more concrete teachers of -3.21, a difference significant at the .05 level as mentioned earlier. The mean for students of the more abstract teachers was noticeably lowered by the neglibible (1.69) change of the male Negro students of these teachers; the white males of these teachers changed an average of -19.24, females of both racial groups an average of more than -11.00. Female white students of the more concrete teachers showed the greatest change of any cell, a mean of -20.41, the other sex-race cells of students of more concrete teachers changing within a range of +4 to -4.

The difference between students of more and less complex teachers was also significant at the .05 level; students of the more complex teachers changed -9.00 on the average, students of the less complex teachers -2.34. Again, a minimal difference was noted in the male Negro student cells of the contrasted teacher types, although there was a comparably slight difference between female white students of the more and the less complex teachers.

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Table 16

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 2: IDENTIFICATION WITH MOTHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

		Mean Scores		Adjusted		
Abstract	Concrete	Pre Test	Post Test	Post Test	Change	S D
All		23.99	14.75	14.87	-9.12	26.55
	All	24.63	21.53	21.42	-3.21	28.54
Female White		27.68	17.84	16.60	-11	
	Female White	38.12	22.80	17.71	-20.41	
Female Negro		24.02	12.64	12.75	-11	
	Female Negro	20.44	20.40	21.83	+1	
Male White		30.39	13.39	11.15	-19	
	Male White	23.00	27.39	27.88	+4	
Male Negro		19.36	15.85	17.67	-1	
	Male Negro	23.52	18.98	19.28	-4	
Females	Females	25.79	17.79	17.24	-8	
Males	Males	23.19	18.41	18.82	-4	
Whites	Whites	29.37	20.36	18.50	-10	
Negroes	Negroes	21.78	17.03	17.96	-3	
Grand Means		24.31	18.14		-6	
Adj. Coef.		.37				

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Table 17

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 2: IDENTIFICATION WITH MOTHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted	Change	S D
		Pre Test	Post Test	Post Test		
All		26.25	17.42	17.25	-9	26.77
	All	25.09	22.47	22.75	-2	27.68
Female White		36.69	22.78	18.62	-18	
	Female White	40.10	27.30	21.84	-18	
Female Negro		20.33	16.06	18.15	-2	
	Female Negro	22.93	29.23	30.33	+7	
Male White		29.23	18.65	17.34	-11	
	Male White	23.67	27.30	28.12	+4	
Male Negro		23.57	15.14	15.99	-7	
	Male Negro	20.80	12.60	14.51	-6	
Females	Females	28.00	22.48	21.65	-6	
Males	Males	24.34	17.29	17.85	-6	
Whites	Whites	31.45	22.99	20.83	-10	
Negroes	Negroes	22.04	16.95	18.39	-3	
Grand Means		25.80	19.37		-6	
Adj. Coef.		.38				

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Task 3 -- Identification with Teacher -- Tables 18 and 19.

On the basis of the two measures of teacher cognitive style, students generally showed little differences on the basis of their teachers' abstractness-concreteness or complexity.

Females tended to evidence a greater effect of teacher conceptual style than did males. Females of the more abstract teachers showed an average change of -.1083 in the case of the white females, -8.59 in the case of Negro females, while the like cells of students of the more concrete teachers averaged changes of +3.23 and +2.58. Male students of the more abstract teachers averaged a lesser change than their female classmates, while male students of the more concrete teachers shifted toward closer identification with teacher in contradistinction to their female classmates who evidenced a slight shift in the opposite direction.

Inter-cell differences tended to be less patterned when student responses to this task were grouped on the basis of teacher complexity. Female students of the less complex teachers tended to change somewhat more toward closer identification than did the female students of the more complex teachers; the same could be said for male Negro students, but the contrary was the case with the male white students--male white students of the more complex teachers tended to shift toward closer identification with teacher to a degree somewhat greater than did white male students of the less complex teachers.

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Table 18

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 3: IDENTIFICATION WITH TEACHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

		Mean Scores				
Abstract	Concrete	Pre Test	Post Test	Adjusted Post Test	Change	S D
All		23.93	17.72	17.89	-6.04	27.51
	All	24.87	21.77	21.61	-3.26	29.48
Female White		30.80	22.20	19.97	-10	
	Female White	27.08	31.24	30.31	+3	
Female Negro		23.06	14.00	14.47	-8	
	Female Negro	18.50	19.02	21.08	+2	
Male White		23.82	19.03	19.23	-4	
	Male White	31.33	25.67	23.25	-8	
Male Negro		22.05	18.20	19.02	-3	
	Male Negro	25.64	18.32	17.89	-7	
Females	Females	23.50	19.91	20.23	-3	
Males	Males	25.09	19.62	19.38	-5	
Whites	Whites	28.16	24.23	22.92	-5	
Negroes	Negroes	22.52	17.50	18.16	-4	
Grand Means		24.40	19.75		-4	
Adj. Coef.		.35				

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Table 19

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 3: IDENTIFICATION WITH TEACHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

MORE COMPLEX	LESS COMPLEX	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		26.08	19.50	20.42	-5	28.46
	All	31.92	25.14	23.67	-8	31.62
Female White		29.78	27.16	26.56	-3	
	Female White	42.40	37.80	32.07	-10	
Female Negro		26.15	21.12	22.01	-4	
	Female Negro	31.60	25.10	23.77	-7	
Male White		25.94	14.71	15.68	-10	
	Male White	29.73	26.83	26.26	-3	
Male Negro		24.49	18.22	19.78	-4	
	Male Negro	28.93	18.40	18.15	-10	
Females	Females	30.80	26.09	25.09	-5	
Males	Males	26.68	18.72	19.39	-7	
Whites	Whites	30.29	24.12	23.32	-6	
Negroes	Negroes	27.02	20.04	20.57	-6	
Grand Means		28.33	21.67		-6	
Adj. Coef.		.41				

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Task 4 -- Identification with Father -- Tables 20 and 21. This task failed to differentiate between contrasting teacher cognitive styles when considering all students of each group of teachers in comparison with all of the contrasting group of teachers. Several cell contrasts, however, are remarkable.

Female students of the more abstract teachers tended to change somewhat more toward closer identification with father (whites -11.80, Negroes -10.54) than did female students of the more concrete teachers (whites -5.35, Negroes -6.88). White male students of the two groups of teachers were negligibly different, but Negro males evidenced the greatest contrast: male Negro students of the more abstract teachers changed only -1.98, while the comparable cell of students of the more concrete teachers changed a mean of -10.97.

As on Task 3, sex-race cell differences tended to be less patterned when students were compared on the basis of teacher complexity. The greatest change was that of the female white students of the less complex teachers, a mean change of -22.12, the female white students of the more complex teachers changing -9.16. In comparison, female Negroes showed little change at all from pretest to posttest on this task; those of the more complex teachers averaged a change of -0.74, those of the less complex teachers -2.08.

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Table 20

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 4: IDENTIFICATION WITH FATHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

		Mean Scores		Adjusted		
Abstract	Concrete	Pre Test	Post Test	Post Test	Change	S D
All		23.44	15.22	15.80	-7.56	26.59
	All	27.01	18.75	18.17	-8.84	29.17
Female White		28.76	18.12	16.96	-11	
	Female White	28.72	24.52	23.37	-5	
Female Negro		23.64	12.58	13.10	-10	
	Female Negro	24.54	17.44	17.66	-6	
Male White		24.79	13.27	13.41	-11	
	Male White	29.03	20.09	18.84	-10	
Male Negro		20.59	17.09	18.61	-1.98	
	Male Negro	27.21	16.89	16.24	-10	
Females	Females	25.64	17.11	16.98	-8	
Males	Males	24.90	16.89	16.99	-7	
Whites	Whites	27.70	18.68	17.87	-9	
Negroes	Negroes	23.98	16.14	16.54	-7	
Grand Means		25.22	16.99		-8	
Adj. Coef.		.33				

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Table 21

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 4: IDENTIFICATION WITH FATHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted Post Test	Change	S D
		Pre Test	Post Test			
All		27.39	18.65	18.82	-8	25.47
	All	28.84	19.81	19.54	-9	30.81
Female White		29.69	21.06	20.53	-9	
	Female White	43.40	26.00	21.28	-22	
Female Negro		25.92	24.56	25.18	-0	
	Female Negro	29.40	27.77	27.32	-2	
Male White		26.73	17.42	17.79	-7	
	Male White	26.77	15.20	15.56	-11	
Male Negro		27.81	14.46	14.50	-13	
	Male Negro	23.38	14.82	16.22	-7	
Females	Females	30.34	24.66	23.93	-6	
Males	Males	26.36	15.38	15.87	-10	
Whites	Whites	30.03	19.12	18.49	-11	
Negroes	Negroes	26.56	19.08	19.50	-10	
Grand Means		27.95	19.10		-8	
Adj. Coef.		.31				

Task 5 -- Centrality -- Tables 22, 22a, 23, and 23a. Mean scores (of limited statistical use on this alternative response task) suggest some differences between students of contrasting cognitive styles, but frequency tables give evidence that these differences are ones involving very few students.

Fifty-five percent of the students of the more abstract teachers maintained the same response on the posttest as they had given on the pretest; 52% of the students of the more concrete teachers did likewise. An identical percentage of students of more abstract and of more concrete teachers shifting from a non-central to a self-central response, this leaves as the only remarkable difference the fact that 3% more of the students of the more concrete teachers shifted from a self-central to a non-central response than did students of the more abstract teachers. The effect within sex-race cells of teacher abstractness-concreteness seems to be greater, however. Males of the more abstract teachers moved away from the self-centrality (whites averaging a change of +.13, Negroes of +.04) while males of the more concrete teachers moved slightly toward self-centrality (whites -.09, Negroes -.02). Females evidenced greater changes generally; females of the more concrete teachers, however, moved in directions opposite that of males generally, and female Negro students of the more abstract teachers did also. Specifically, the mean changes of female Negro students of the more abstract teachers and of the male students

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Table 22

STUDENTS OF MORE ABSTRACT TEACHERS
COMPARED WITH
STUDENTS OF MORE CONCRETE TEACHERS

TASK 5: CENTRALITY

ALTERNATIVES: 1 (SELF IS CENTRAL) or 2 (FRIEND IS CENTRAL)

		Mean Scores		Adjusted	
Abstract	Concrete	Pre Test	Post Test	Post Test	Change
All		1.43	1.46	1.46	+.03
	All	1.32	1.40	1.40	+.08
Female White		1.40	1.56	1.56	+.16
	Female White	1.12	1.52	1.51	+.41
Female Negro		1.48	1.38	1.38	-.10
	Female Negro	1.32	1.45	1.48	+.16
Male White		1.39	1.52	1.52	+.13
	Male White	1.42	1.33	1.33	-.09
Male Negro		1.42	1.45	1.46	+.04
	Male Negro	1.35	1.33	1.33	-.02
Females	Females	1.35	1.47	1.47	+.12
Males	Males	1.39	1.40	1.40	+.01
Whites	Whites	1.34	1.47	1.47	+.13
Negroes	Negroes	1.39	1.41	1.41	+.02
Grand Means		1.38	1.43		+.05
Adj. Coef.		-.02			

PRE TO POST RESPONSE	ABSTRACT	CONCRETE
Shifted 1 to 2	56	73
Stayed 1 to 1	82	103
Stayed 2 to 2	46	38
Shifted 2 to 1	50	57

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Table 23

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 5: CENTRALITY

ALTERNATIVES: 1 (SELF IS CENTRAL) or 2 (FRIEND IS CENTRAL)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted	
		Pre Test	Post Test	Post Test	Change
All		1.38	1.46	1.46	+.08
	All	1.40	1.38	1.38	-.02
Female White		1.47	1.47	1.47	±.00
	Female White	1.35	1.40	1.40	+.05
Female Negro		1.42	1.40	1.40	-.02
	Female Negro	1.47	1.37	1.37	-.10
Male White		1.42	1.46	1.46	+.04
	Male White	1.33	1.47	1.46	+.13
Male Negro		1.29	1.51	1.51	+.22
	Male Negro	1.42	1.31	1.31	-.11
Females	Females	1.43	1.41	1.41	-.02
Males	Males	1.36	1.45	1.45	+.09
Whites	Whites	1.40	1.45	1.45	+.05
Negroes	Negroes	1.38	1.42	1.42	+.04
Grand Means		1.39	1.43		+.04
Adj. Coef.		-.03			

PRE TO POST RESPONSE	MORE COMPLEX	LESS COMPLEX
Shifted 1 to 2	77	52
Stayed 1 to 1	101	86
Stayed 2 to 2	42	38
Shifted 2 to 1	61	49

of the more concrete teachers were in a direction toward self-centrality, all others in the opposite direction, with female white students of the more concrete teachers evidencing the greatest mean change, +.41.

Fifty-two percent of the students of the more complex teachers and 53% of the students of the less complex teachers maintained the same pre- and posttest responses on this task; a slightly greater percentage of students of the more complex teachers (23%) than of the less complex teachers (20%) shifted toward self-centrality, while slightly more of the students of less complex teachers (27%) shifted away from self-centrality than students of the more complex teachers (25%). Mean scores of the sex-race cells indicate shifts toward self-centrality by both the female and male Negro students of the less complex teachers (-.10 and -.11), while marked shifts away from self-centrality, in terms of cell mean changes, were noted for male white students of the less complex teachers (+.13) and male Negro students of the more complex teachers (+.22).

Task 6 -- Identification with Adults -- Tables 24, 24a, 25, and 25a. Mean scores suggest some cell differences, including elements of commonality between the two measures of teacher cognitive style; an overview of paired pre- and posttest scores indicates differences between contrasted student groups almost as slight as described for Task 5.

Over two-thirds of students both of the more abstract and the more concrete teachers persisted in their response on this task; 3% more of the students of the more abstract teachers (13%) shifted away from identification with adults than did students of the more concrete teachers (10%), while 2% more of the latter (20%) shifted toward identification with adults than did the former (18%). The mean of cell changes, as with Task 5 computed on alternative responses and hence of limited statistically validity) give evidence of a greater shift toward closer identification with adults by students of the more concrete teachers, their posttest scores, adjusted for pretest differences, averaging 0.12 less than their pretest scores, while the difference, or change, for the students of the more abstract teachers was only -.06. This change was more pronounced for the white students (of both sexes) than for the Negroes.

Over two-thirds of the students both of the more and the less complex teachers likewise persisted in their response on this task; 4% more, or 12%, of the students of the more complex teachers shifted away from identification with adults (as had 3% more of the students of the more abstract teachers) than did students of the less complex teachers (8%), while 1% more of the latter (21%) shifted toward closer identification with adults than did the former. Differences between cell means on the basis of teacher complexity were no more remarkable than these frequencies of shifts indicate.

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Table 24

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 6: IDENTIFICATION WITH ADULTS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

Abstract	Concrete	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change
All		1.43	1.36	1.37	-.06
	All	1.49	1.39	1.37	-.12
Female White		1.52	1.32	1.30	-.22
	Female White	1.64	1.36	1.29	-.35
Female Negro		1.40	1.34	1.36	-.04
	Female Negro	1.44	1.40	1.41	-.03
Male White		1.45	1.42	1.43	-.02
	Male White	1.52	1.39	1.37	-.15
Male Negro		1.39	1.36	1.39	±.00
	Male Negro	1.45	1.38	1.38	-.07
Females	Females	1.47	1.36	1.35	-.12
Males	Males	1.44	1.38	1.39	-.05
Whites	Whites	1.53	1.38	1.35	-.18
Negroes	Negroes	1.42	1.37	1.38	-.04
Grand Means		1.46	1.37		-.09
Adj. Coef.		.36			

PRE TO POST RESPONSE	ABSTRACT	CONCRETE
Shifted 1 to 2	30	27
Stayed 1 to 1	105	118
Stayed 2 to 2	56	73
Shifted 2 to 1	43	53

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Table 25

STUDENTS OF MORE COMPLEX TEACHERS
COMPARED WITH
STUDENTS OF LESS COMPLEX TEACHERS

TASK 6: IDENTIFICATION WITH ADULTS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

MORE COMPLEX	LESS COMPLEX	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change
All		1.48	1.39	1.38	-.10
	All	1.45	1.38	1.38	-.07
Female White		1.69	1.47	1.38	-.31
	Female White	1.70	1.45	1.36	-.24
Female Negro		1.42	1.42	1.44	+.02
	Female Negro	1.43	1.50	1.51	+.08
Male White		1.56	1.44	1.40	-.16
	Male White	1.37	1.23	1.27	-.10
Male Negro		1.39	1.31	1.34	-.05
	Male Negro	1.40	1.36	1.38	-.02
Females	Females	1.53	1.45	1.43	-.10
Males	Males	1.43	1.34	1.35	-.08
Whites	Whites	1.57	1.40	1.36	-.21
Negroes	Negroes	1.41	1.37	1.40	-.01
Grand Means		1.47	1.38		-.09
Adj. Coef.		.39			

PRE TO POST RESPONSE	MORE COMPLEX	LESS COMPLEX
Shifted 1 to 2	31	27
Stayed 1 to 1	123	102
Stayed 2 to 2	70	57
Shifted 2 to 1	57	39

5594

Task 7 -- Identification with Peers -- Tables 26, 26a, 27, and 27a. Mean scores and paired response frequencies indicate negligible differences between students either of more or less abstract (concrete) teachers or those of higher or lower complexity. Some sex-race cell differences are observable, however.

White students of the more abstract teachers tended to change more (females -.12, males -.21) than did the white students of the more concrete teachers (females -.06, males -.09); the contrary was observed in the case of female Negro students (those with the more abstract teachers -.18, the more concrete teachers -.07), with no remarkable difference discerned in the case of male Negro students (those with the more abstract teachers -.12, the more concrete teachers -.10).

When compared on the basis of teacher complexity, an extreme difference between male white students of .29 was noted; male white students of the more complex teachers averaging a mean change of -.07, male white students of the less complex teachers a mean change of -.36. Both white and Negro female students of the more complex teachers tended to show a greater change (toward closer identification with peers, the same direction as for all race-sex cells of students of both higher and lower complexity teachers) than females of the less complex teachers, the students of the more complex teachers moving from distinctly different pre-test mean scores of 1.69 in the case of the white females and 1.52

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Table 26

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 7: IDENTIFICATION WITH PEERS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

Abstract	Concrete	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.53	1.41	1.41	-.12
	All	1.49	1.37	1.38	-.11
Female White		1.56	1.52	1.50	-.06
	Female White	1.52	1.40	1.40	-.12
Female Negro		1.52	1.34	1.34	-.18
	Female Negro	1.48	1.40	1.41	-.07
Male White		1.58	1.52	1.49	-.09
	Male White	1.58	1.39	1.37	-.21
Male Negro		1.50	1.38	1.38	-.12
	Male Negro	1.45	1.33	1.35	-.10
Females	Females	1.51	1.40	1.40	-.11
Males	Males	1.51	1.39	1.39	-.12
Whites	Whites	1.56	1.46	1.44	-.12
Negroes	Negroes	1.49	1.36	1.37	-.12
Grand Means		1.51	1.39		-.12
Adj. Coef.		.32			

PRE TO POST RESPONSE	ABSTRACT	CONCRETE
Shifted 1 to 2	27	27
Stayed 1 to 1	88	108
Stayed 2 to 2	70	78
Shifted 2 to 1	49	58

5596

Table 27

STUDENTS OF MORE COMPLEX TEACHERS
COMPARED WITH
STUDENTS OF LESS COMPLEX TEACHERS

TASK 7: IDENTIFICATION WITH PEERS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted	
		Pre Test	Post Test	Post Test	Change
All		1.52	1.40	1.41	-.11
	All	1.54	1.42	1.42	-.12
Female White		1.69	1.50	1.44	-.25
	Female White	1.60	1.55	1.52	-.08
Female Negro		1.52	1.42	1.42	-.10
	Female Negro	1.57	1.57	1.55	-.02
Male White		1.56	1.50	1.49	-.07
	Male White	1.67	1.37	1.31	-.36
Male Negro		1.42	1.29	1.34	-.08
	Male Negro	1.42	1.31	1.35	-.07
Females	Females	1.58	1.49	1.47	-.11
Males	Males	1.49	1.36	1.37	-.12
Whites	Whites	1.62	1.48	1.44	-.18
Negroes	Negroes	1.47	1.37	1.39	-.08
Grand Means		1.53	1.41		-.12
Adj. Coef.		.41			

PRE TO POST RESPONSE	MORE COMPLEX	LESS COMPLEX
Shifted 1 to 2	30	18
Stayed 1 to 1	118	86
Stayed 2 to 2	79	73
Shifted 2 to 1	54	48

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in the case of the Negro females to a very close adjusted posttest scores of 1.44 and 1.42, the female students of the less complex teachers moving from less spread pretest means of 1.60 in the case of the white females and 1.57 in the case of the Negro females to somewhat higher (indicative of lesser identification) adjusted posttest means of 1.52 and 1.55 respectively.

Task 8 -- Self Esteem -- Tables 28 and 29. The students of the more concrete teachers showed a somewhat higher posttest score (indicative of lower self-esteem) after adjustment for pretest differences (2.93) than did the students of the more abstract teachers, but the changes between pretest and adjusted posttest scores were almost the same (-.20 and -.19). The change after adjustment in the case of students of more and less complex teachers was more pronounced, -.19 in the case of the former, -.32 in the case of the latter.

Mean changes involving a differentiation of teacher abstractness fell into four distinctly separate groups on the basis of race and sex cells, with differences of sex and race being much more profound than the differences between like sex-race cells compared on the basis of the relevant teacher characteristic. Although both cells of female Negroes showed a change toward lower self-esteem, male Negroes a very slight change toward higher self-esteem, female whites a moderate change in a like direction, and male whites the greatest change toward higher self-esteem,

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remarkable differences within the sex-race pairs still existed in the cases of both sexes of the white racial group. Female white students of the more abstract teachers showed the greatest, .26, difference from their counterparts with more concrete teachers; male white students of the more abstract teachers evidenced a change in the same direction as both sexes of Negro students of the more abstract teachers, but less toward high self-esteem than their counterparts with more concrete teachers; in the case of the white males, those with more abstract teachers changing -.87, with more concrete teachers changing a mean of -1.09.

The general tendency of students with the less complex teachers to change more toward higher self-esteem than students of the more complex teachers was largely a function of the pronounced contrast by the females. Female students with the more concrete teachers evidenced changes of -.42 in the case of female whites, -146 in the case of the female Negroes, white the two female cells of the more abstract teachers changed on -.02 and +.07. Male white students reversed the overall average, those of the more abstract teachers changing -.56 while those of the more concrete teachers changing only -.30. The difference in change between the two cells of male Negroes was negligible, although as with female Negroes it could be remarked that a higher adjusted posttest score, indicative of lower self-esteem, was noted for those (Negroes) of the more abstract teachers than those of the more concrete teachers.

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Table 26

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 8: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

Abstract	Concrete	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		3.05	2.84	2.85	-.20	1.63
	All	3.12	2.94	2.93	-.19	1.67
Female White		3.08	2.56	2.56	-.52	
	Female White	2.84	2.52	2.58	-.26	
Female Negro		3.04	3.20	3.21	+.17	
	Female Negro	2.94	3.14	3.17	+.23	
Male White		3.33	2.52	2.46	-.87	
	Male White	3.61	2.64	2.52	-1.09	
Male Negro		2.91	2.85	2.89	-.02	
	Male Negro	3.12	3.09	3.08	-.04	
Females	Females	2.98	2.96	2.98	±.00	
Males	Males	3.17	2.84	2.82	-.35	
Whites	Whites	3.25	2.56	2.52	-.73	
Negroes	Negroes	3.00	3.06	3.07	+.07	
Grand Means		3.09	2.89			
Adj. Coef.		.23				

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Table 29

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 8: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

MORE COMPLEX	LESS COMPLEX	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		3.07	2.88	2.88	-.19	1.63
	All	3.09	2.77	2.77	-.32	1.66
Female White		2.75	2.69	2.73	-.02	
	Female White	2.85	2.40	2.43	-.42	
Female Negro		3.02	3.08	3.09	+.07	
	Female Negro	3.27	2.83	2.81	-.46	
Male White		3.12	2.56	2.56	-.56	
	Male White	3.07	2.77	2.77	-.30	
Male Negro		3.21	3.04	3.02	-.19	
	Male Negro	3.09	2.89	2.89	-.20	
Females	Females	2.98	2.82	2.84	-.14	
Males	Males	3.14	2.85	2.84	-.30	
Whites	Whites	2.98	2.62	2.63	-.35	
Negroes	Negroes	3.14	2.98	2.97	-.17	
Grand Means		3.08	2.84		-.24	
Adj. Coef.		.14				

Task 9 -- Power with Teacher -- Tables 30 and 31. Remarkable differences were noted between students of the more abstract and the more concrete teachers and between students of the more and less complex teachers. In the first instance, students of the more abstract teachers averaged less change toward higher teacher power than those of the more concrete teachers; in the second, students of the less complex teachers changed toward higher student power while students of the more complex teachers changed in the opposite direction.

The greater change of the students of the more concrete teachers was observed to be largely a function of the male white cells. The male white students of more abstract teachers changed from a pretest 2.97 mean to an adjusted posttest mean of 2.68, or -.29; the male white students of the more concrete teachers from a pretest mean of 3.21 to an adjusted posttest mean of 2.65, or -.56.

The considerable (not significant) change between students of more and less complex teachers, a difference of .38, was even more pronounced in the case of females; female white students of high and low complexity teachers changed -.29 and +.48 respectively, female Negro students of high and low complexity teachers -.46 and +.01 respectively. The contrast between Negro male students of the more and less complex teachers was of similar magnitude, the mean changes being -.17 and +.17 respectively. The overall average change was tempered by the relatively slight contrast between male white students of high and low complexity teachers, the mean changes being -.42 and -.33.

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Table 30

STUDENTS OF MORE ABSTRACT TEACHERS
COMPARED WITH
STUDENTS OF MORE CONCRETE TEACHERS

TASK 9: POWER WITH TEACHER

RANGE: 1 (TEACHER MORE POWERFUL) to 5 (SELF MORE POWERFUL)

Abstract	Concrete	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		3.02	2.86	2.87	-.05	1.36
	All	3.16	2.99	2.99	-.17	1.36
Female White		2.72	2.68	2.73	+.01	
	Female White	2.88	2.92	2.95	+.07	
Female Negro		3.12	3.04	3.04	-.08	
	Female Negro	3.36	3.30	3.26	-.10	
Male White		2.97	2.67	2.68	-.29	
	Male White	3.21	2.67	2.65	-.56	
Male Negro		3.09	2.89	2.89	-.20	
	Male Negro	3.08	2.95	2.96	-.12	
Females	Females	3.09	3.05	3.05	-.04	
Males	Males	3.09	2.84	2.84	-.25	
Whites	Whites	2.97	2.72	2,74	-.23	
Negroes	Negroes	3.15	3.03	3.02	-.13	
Grand Means		3.09	2.93		-.16	
Adj. Coef.		.14				

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Table 31

STUDENTS OF MORE COMPLEX TEACHERS
COMPARED WITH
STUDENTS OF LESS COMPLEX TEACHERS

TASK 9: POWER WITH TEACHER

RANGE: 1 (TEACHER MORE POWERFUL) to 5 (SELF MORE POWERFUL)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S D
All		3.09	2.79	2.77	-.32	1.36
	All	2.83	2.86	2.89	+.06	1.43
Female White		2.87	2.56	2.58	-.29	
	Female White	2.55	2.95	3.03	+.48	
Female Negro		3.23	2.81	2.77	-.46	
	Female Negro	3.10	3.13	3.11	+.01	
Male White		3.00	2.58	2.58	-.42	
	Male White	2.80	2.43	2.47	-.33	
Male Negro		3.15	3.01	2.98	-.17	
	Male Negro	2.80	2.93	2.97	+.17	
Females	Females	3.01	2.85	2.84	-.17	
Males	Males	2.98	2.80	2.80	-.18	
Whites	Whites	2.85	2.60	2.63	-.22	
Negroes	Negroes	3.08	2.96	2.95	-.13	
Grand Means		2.99	2.82		-.17	
Adj. Coef.		.19				

Task 10 -- Power with Policeman -- Tables 32 and 33. Comparison of students of the more abstract and more concrete teachers gave evidence of remarkable effect of teacher conceptual style upon results of this task, but the effect takes on complications when the individual sex-race cells are considered. Given a difference of adjusted mean posttest scores, little difference is evidenced in the mean changes of the gross groups of students of the more and less complex teachers, but remarkable contrasts emerge when the sex-race cells are separately considered.

Female white students of the more abstract teachers were the only cell of the students of these teachers who changed from pre- to posttest toward higher power with the police than comparable students of the more concrete teachers. It should be additionally noted that the female white students of the more abstract teachers had in common a shift toward an increased feeling and expression of power of the child in relation to police together with female Negro and male white students of the more concrete teachers.

The female white students of the more complex teachers showed a marked shift toward less power in relation to police (-.34), but a relatively close change was evidenced by the female white students of the less complex teachers (-.24), and a greater shift in the same direction was indicated by the mean change of female Negro students of the less complex teachers (-.40). Except in the case of female Negroes, students of the more complex teachers

Table 32

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 10: POWER WITH POLICEMAN

RANGE: 1 (POLICEMAN MORE POWERFUL) to 5 (SELF MORE POWERFUL)

Abstract	Concrete	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		3.09	2.93	2.92	-.17	1.32
	All	3.03	3.01	3.02	-.01	1.30
Female White		2.96	3.16	3.17	+.21	
	Female White	3.00	2.84	2.85	-.15	
Female Negro		3.10	2.88	2.87	-.23	
	Female Negro	3.02	3.02	3.03	+.01	
Male White		2.91	2.82	2.84	-.07	
	Male White	2.61	2.79	2.86	+.25	
Male Negro		3.23	2.92	2.90	-.33	
	Male Negro	3.26	3.18	3.15	-.11	
Females	Females	3.03	2.97	2.97	-.06	
Males	Males	3.08	2.97	2.97	-.11	
Whites	Whites	2.85	2.89	2.92	+.07	
Negroes	Negroes	3.16	3.01	2.99	-.17	
Grand Means		3.06	2.97		-.09	
Adj. Coef.		.15				

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Table 33

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 10: POWER WITH POLICEMAN

RANGE: 1 (POLICEMAN MORE POWERFUL) to 5 (SELF MORE POWERFUL)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S D
All		3.06	2.90	2.90	-.16	1.30
	All	2.92	2.78	2.79	-.13	1.27
Female White		3.22	2.91	2.88	-.34	
	Female White	2.90	2.65	2.66	-.24	
Female Negro		2.96	2.79	2.80	-.16	
	Female Negro	3.03	2.63	2,63	-.40	
Male White		2.87	2.71	2.72	-.15	
	Male White	2.63	2.60	2.64	+.01	
Male Negro		3.19	3.11	3.09	-.10	
	Male Negro	3.04	3.07	3.06	+.02	
Females	Females	3.03	2.76	2.76	-.27	
Males	Males	2.99	2.92	2.92	-.07	
Whites	Whites	2.91	2.72	2.73	-.18	
Negroes	Negroes	3.08	2.95	2.94	-.14	
Grand Means		3.01	2.86			
Adj. Coef.		.11				

showed more of a change toward higher power of self (-.34 for female whites, -.15 and -.10 for the males) than did like students of the less complex teachers (-.24 for female whites, +.01 and +.02 for the males), but the mean adjusted posttest scores for all sex-race cells of students of the more complex teachers were all higher (indicative of more power of the child in comparison with police) than of students of the less complex teachers (the respective means being 2.90 and 2.79).

Task 11 -- Individuation -- Tables 34, 34a, 35, and 35a. A slight difference of direction of change can be noted between students of the more abstract and the more concrete teachers (mean changes of +.05 and -.03 respectively), but the differences between students of the more and the less complex teachers are to be found only within the sex-race cells (overall changes averaging +.06 and +.07 respectively).

The only difference greater than the overall one between students of more abstract and more concrete teachers was that evidenced by the cells of male Negroes, those of the more abstract teachers changing a mean of +.11 (toward less individuation), those of the more concrete teachers -.04 (toward a higher degree of individuation).

Female students and male students showed contradictory patterns when compared on the basis of teacher complexity. Females of the less complex teachers shifted, from pre- to posttest, away from

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Table 34

STUDENTS OF MORE ABSTRACT TEACHERS

COMPARED WITH

STUDENTS OF MORE CONCRETE TEACHERS

TASK 11: INDIVIDUATION

ALTERNATIVES: 1 (SELF SAME AS OTHERS) or 2 (SELF DIFFERENT FROM OTHERS)

Abstract	Concrete	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change
All		1.34	1.39	1.39	+.05
	All	1.39	1.37	1.36	-.03
Female White		1.40	1.44	1.43	+.03
	Female White	1.36	1.40	1.40	+.04
Female Negro		1.34	1.34	1.34	±.00
	Female Negro	1.40	1.34	1.33	-.07
Male White		1.30	1.33	1.34	+.04
	Male White	1.33	1.36	1.37	+.04
Male Negro		1.33	1.44	1.44	+.11
	Male Negro	1.41	1.38	1.37	-.04
Females	Females	1.37	1.37	1.36	-.01
Males	Males	1.35	1.39	1.39	+.04
Whites	Whites	1.34	1.38	1.38	+.04
Negroes	Negroes	1.37	1.38	1.38	+.01
Grand Means		1.36	1.38		+.02
Adj. Coef.		.18			

PRE TO POST RESPONSE	ABSTRACT	CONCRETE
Shifted 1 to 2	52	48
Stayed 1 to 1	100	126
Stayed 2 to 2	39	56
Shifted 2 to 1	48	41

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Table 35

STUDENTS OF MORE COMPLEX TEACHERS

COMPARED WITH

STUDENTS OF LESS COMPLEX TEACHERS

TASK 11: INDIVIDUATION

ALTERNATIVES: 1 (SELF SAME AS OTHERS) or 2 (SELF DIFFERENT FROM OTHERS)

MORE COMPLEX	LESS COMPLEX	Mean Scores		Adjusted	
		Pre Test	Post Test	Post Test	Change
All		1.37	1.43	1.43	+.06
	All	1.34	1.40	1.41	+.07
Female White		1.44	1.41	1.39	-.05
	Female White	1.45	1.60	1.58	+.13
Female Negro		1.31	1.35	1.37	+.06
	Female Negro	1.17	1.43	1.48	+.31
Male White		1.42	1.46	1.44	+.02
	Male White	1.37	1.33	1.33	-.04
Male Negro		1.36	1.47	1.47	+.11
	Male Negro	1.38	1.33	1.33	-.05
Females	Females	1.33	1.42	1.43	+.10
Males	Males	1.38	1.42	1.41	+.03
Whites	Whites	1.42	1.44	1.43	+.01
Negroes	Negroes	1.32	1.41	1.41	+.11
Grand Means		1.36	1.42		+.06
Adj. Coef.		.24			

PRE TO POST RESPONSE	MORE COMPLEX	LESS COMPLEX
Shifted 1 to 2	52	43
Stayed 1 to 1	126	102
Stayed 2 to 2	57	39
Shifted 2 to 1	46	41

5610

individuation, while male students of the more complex teachers shifted this same way. This contrast of a sex difference on the basis of teacher complexity was statistically significant at better than the .05 level.

Effect of Teachers' Perceptions

Significant Effects

On the instrument measuring expressed perception of disliked students by the teachers, one comparison of students of the teachers perceiving disliked students more positively with students of teachers perceiving disliked students relatively negatively emerged as statistically significant. On Self-Social Symbols Task 10, Power with Policeman, the difference between the 225 students of the 25 teachers scoring more than half a standard deviation above the mean contrasted with the 233 students of the teachers scoring more than a half a standard deviation below the mean yielded a significance of 0.05 (F = 4.37). The mean score of all teachers on this scale of perception was 51.83, this within a range of zero to 84, with a standard deviation of 21.72. The students of teachers scoring more than half a standard deviation above the mean had a mean pretest score on Task 10 of 3.12 (on a 1 to 5 scale) a mean posttest score, after adjustment for pretest differences between groups, of 3.07, the change (-0.05)

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being a slight shift toward less assertion of power by the student. The students of the negatively perceiving teachers, i.e., those scoring more than half a standard deviation below the mean on the measure of perception, averaged 2.95 on the pretest, 2.75 (after adjustment) on the posttest, a mean change of -0.20.

On the measure of teacher attitude toward the poor no statistically significant differences resulted from analysis comparing students of teachers with a more favorable attitude with students of teachers with a less favorable attitude.

Full tables describing student performance on each of the eleven Self-Social Symbols Tasks, comparing students of teachers high and low on the cited measures of teacher perception, follow with comments about remarkable differences.

Task 1 -- Self-Esteem -- Tables 36 and 37. The mean changes of students of the teachers perceiving disliked students more positively or more negatively were quite close (-0.14 and -0.09, respectively). Students of the teachers with the less favorable attitude toward the poor changed from a pretest mean score of 1.75 on this 1 to 5 scale of self-esteem to a posttest mean score, after adjustment for pretest differences between groups, of 1.79, a slight (+0.04) lowering of self-esteem, while students of the teachers with a more favorable attitude changed from a mean of 1.91 to 1.66, a distinct (-0.25) change toward higher self-esteem.

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The overall closeness of change of students of the positively and negatively perceiving teachers remarked upon above was a function of contradictory directions of change in the constituent sex-race cells. White students of the more positive teachers changed toward higher self-esteem (females changing a mean of -0.69, males -0.09), as did the male Negroes of these more positive teachers (-0.07), while their sex and race counterparts with negatively perceiving teachers, in the case of the whites, changed toward lower self-esteem (females averaging a change of +0.03, males +0.26), and in the case of the male Negroes with relatively negative teachers changed not at all from pre- to adjusted post-test scores on this task. The common direction of these three pairs of cells were largely cancelled out, however, by the contrary direction of change of the female Negro students, those of the more positive teachers changing toward lower self-esteem (a mean of +0.13), those of the relatively negative teachers toward higher self-esteem (-0.56).

White students of both sexes showed the greatest difference on the basis of teacher attitude. White students of the favorable attitude teachers showed considerable changes toward higher self-esteem (females a mean of -0.54, males of -0.47), while the white students of teachers with less favorable attitude changed in a direction indicative of lowered self-esteem (females +0.18, males +0.50). Differences between Negroes compared on the basis of contrasting teacher attitude were not remarkable.

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Table 36

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION
COMPARED WITH
STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION
TASK 1: SELF ESTEEM
RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		1.99	1.87	1.85	-.14	1.30
	All	1.85	1.75	1.76	-.09	1.40
Female White		2.12	1.47	1.43	-.69	
	Female White	2.00	2.04	2.03	+.03	
Female Negro		1.73	1.81	1.86	+.13	
	Female Negro	2.06	1.53	1.50	-.56	
Male White		2.25	2.22	2.16	-.09	
	Male White	1.80	2.03	2.06	+.26	
Male Negro		1.95	1.88	1.88	-.07	
	Male Negro	1.64	1.58	1.64	±.00	
Females	Females	1.95	1.70	1.70	-.25	
Males	Males	1.91	1.91	1.91	±.00	
Whites	Whites	2.06	1.95	1.92	-.14	
Negroes	Negroes	1.84	1.72	1.74	-.10	
Grand Means		1.93	1.82		-.11	
Adj. Coef.		.21				

5614

Table 37

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 1: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

FAVORABLE	UNFAVORABLE	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S D
All		1.91	1.68	1.66	-.25	1.67
	All	1.75	1.76	1.79	+.04	1.29
Female White		2.12	1.66	1.58	-.54	
	Female White	1.57	1.68	1.75	+.18	
Female Negro		1.92	1.57	1.55	-.37	
	Female Negro	1.92	1.63	1.61	-.31	
Male White		2.06	1.66	1.59	-.47	
	Male White	1.57	2.00	2.07	+.50	
Male Negro		1.74	1.81	1.83	+.09	
	Male Negro	1.73	1.83	1.85	+.12	
Females	Females	1.90	1.62	1.60	-.30	
Males	Males	1.76	1.82	1.83	+.07	
Whites	Whites	1.85	1.74	1.74	-.11	
Negroes	Negroes	1.83	1.71	1.71	-.12	
Grand Means		1.83	1.72		-.11	
Adj. Coef.			.27			

5615

Task 2 -- Identification with Mother -- Tables 38 and 39. The overall difference between students of positively and negatively perceiving teachers generally was not remarkable, and the difference between students of teachers with more and with less favorable attitudes was negligible. However, the interaction of relative teacher perception and sex of student was significant (at the .01 level, F = 7.48). Female students of the more positively perceiving teachers showed a mean adjusted posttest score somewhat lower (and hence indicative of closer identification) than that of female students of the relatively negative teachers. Male students of the more positive teachers showed a mean change somewhat higher (and hence indicative of less close identification) than that of the male students of the relatively negative teachers.

It is further remarked that the only students changing toward less identification were the Negro students, of both sexes, of the negatively perceiving teachers (female Negroes changing a mean of +1.76, males +3.60).

Male Negro students of teachers with less favorable attitude were the only cell related to teacher attitude to show a mean change in the direction of most distant identification with mother (a mean of +1.88). White students of the teachers with the less favorable attitude showed the greatest changes of any cells (females, a mean of -15.06; males -20.64).

.616

Table 38

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION

COMPARED WITH

STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 2: IDENTIFICATION WITH MOTHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

POSITIVE	NEGATIVE	Mean Scores		Adjusted	Change	S D
		Pre Test	Post Test	Post Test		
All		28.77	18.26	17.56	-11	25.39
	All	22.82	14.19	15.13	-7	30.76
Female White		32.97	21.28	19.43	-13	
	Female White	37.08	17.46	14.48	-22	
Female Negro		30.08	11.12	10.06	-20	
	Female Negro	21.83	21.86	23.07	+1	
Male White		28.67	23.82	23.15	-5	
	Male White	26.07	13.40	13.44	-12	
Male Negro		25.55	18.63	18.82	-6	
	Male Negro	13.84	6.84	10.24	+3	
Females	Females	29.82	17.29	16.30	-13	
Males	Males	23.34	15.89	16.68	-6	
Whites	Whites	30.75	19.48	18.24	-12	
Negroes	Negroes	23.21	14.53	15.36	-7	
Grand Means		26.22	16.51		-9	
Adj. Coef.		.27				

5617

Table 39

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 2: IDENTIFICATION WITH MOTHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

FAVORABLE	UNFAVORABLE	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S D
All		24.63	18.03	17.53	-7	24.69
	All	21.47	13.98	14.56	-6	28.16
Female White		33.50	24.75	21.21	-12	
	Female White	25.11	10.71	10.05	-15	
Female Negro		25.42	14.97	14.20	-11	
	Female Negro	20.60	14.49	15.37	-5	
Male White		25.34	23.84	23.10	-1	
	Male White	30.46	12.32	9.82	-20	
Male Negro		19.60	15.53	16.75	-2	
	Male Negro	16.73	15.65	17.85	+1	
Females	Females	25.14	15.81	15.13	-10	
Males	Males	21.17	16.47	17.15	-4	
Whites	Whites	28.66	18.33	16.45	-12	
Negroes	Negroes	20.71	15.17	16.00	-4	
Grand Means		23.16	16.14		-7	
Adj. Coef.			.34			

Task 3 -- Identification with Teacher -- Tables 40 and 41.

Although students of the negatively perceiving teachers averaged a lower posttest score (17.68 after adjustment) than did students of the more positive teachers (22.09), the changes from pre- to posttest were on the same order (-7.64, -6.51). The interaction of relative teacher perception and race of student was significant statistically (F = 4.08, p = .05). White students of the more positive teachers moved away from identification with teacher (females changing a mean of +5.24, males +4.73); Negro students of these same teachers moved toward closer identification with teacher (females -15.81, males -12.80). White students of the relatively negative teachers, on the other hand, moved toward closer identification (females changing a mean of -19.86, males -14.02), while the Negro students of these negative teachers evidenced a change which in relative terms was the least change, in absolute terms a very slight change away from identification with teacher (females changing a mean of -3.30, males -0.34).

Students of teachers with a more favorable attitude tended to change less than did students of teachers with a less favorable attitude (the mean changes being -5.26 and -10.75 respectively). This difference was most noticeable in the case of the white males, those of the teachers with the more favorable attitude hardly changing in identification at all from pre- to posttest (averaging a change of -0.63), which those white males of the teachers with the less favorable attitude changed markedly toward closer identification (a mean of -15.47).

5619

Table 40

STUDENTS OF TEACHERS WITH HIGH ASSUMED SIMILIARITY

COMPARED WITH

STUDENTS OF TEACHERS WITH LOW ASSUMED SIMILIARITY

TASK 3: IDENTIFICATION WITH TEACHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		28.60	22.55	22.09	-6	28.23
	All	25.32	17.07	17.68	-7	31.48
Female White		24.31	29.12	30.07	+5	
	Female White	36.17	19.25	16.31	-19	
Female Negro		32.40	18.29	16.59	-15	
	Female Negro	26.00	22.31	22.70	-3	
Male White		23.02	25.92	27.29	+4	
	Male White	30.90	18.10	16.88	-14	
Male Negro		31.57	20.20	18.77	-12	
	Male Negro	15.27	11.02	14.93	-0	
Females	Females	29.55	21.96	21.19	-8	
Males	Males	25.31	18.79	19.41	-5	
Whites	Whites	27.73	23.60	23.43	-4	
Negroes	Negroes	26.84	17.93	18.05	-8	
Grand Means		27.19	20.20		-7	
Adj. Coef.		.33				

5621

Table 41

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 3: IDENTIFICATION WITH TEACHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

FAVORABLE	UNFAVORABLE	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change	S D
All		24.25	18.65	18.99	-5	25.51
	All	26.04	15.68	15.29	-10	30.06
Female White		29.91	29.62	27.65	-2	
	Female White	24.93	19.86	19.92	-5	
Female Negro		24.81	17.14	17.25	-7	
	Female Negro	30.32	17.40	15.26	-15	
Male White		19.53	16.62	18.90	- ..63	
	Male White	27.36	12.82	11.89	-15.47	
Male Negro		23.29	16.18	16.91	-6	
	Male Negro	21.67	13.38	14.78	-6	
Females	Females	27.44	19.66	18.70	-8	
Males	Males	22.73	14.87	15.83	-6	
Whites	Whites	25.38	19.96	19.84	-5	
Negroes	Negroes	24.96	16.07	16.12	-9	
Grand Means		25.09	17.26		-7.83	
Adj. Coef.		.41				

5621

Task 4 -- Identification with Father -- Tables 42 and 43. Overall changes, on the basis either of teacher perception or attitude, were not remarkable.

Greatest changes were made by the white students of teachers of relatively negative perception, females changing a mean of -14.45, males a mean of -18.53. When students were compared on the basis of teacher attitude, the white male students of the teachers with the less favorable attitude showed a relatively great change (a mean of -14.80), but a somewhat greater change was evidenced by the female Negro students of these same teachers (the mean change being -16.21 in this instance); female white students of these teachers were the only cell to change away from identification with father (averaging a change of +2.05).

Task 5 -- Centrality -- Tables 44 and 45. Nonparametric analysis showed a slight, but hardly remarkable, tendency by students of the more positive teachers to move toward higher centrality, and of the students of the relatively negative teachers to move away from self-centrality, but reference to Table 44 will show how little this shift was. Comparably, students of teachers with a more favorable attitude showed a slight tendency to move toward higher centrality, students of the teachers with the less favorable attitude moved toward lower centrality.

Consideration of cell means, although of little validity in statistical terms, suggests some remarkable differences on the

5622

Table 42

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION

COMPARED WITH

STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 4: IDENTIFICATION WITH FATHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		27.95	20.73	20.46	-7	43.66
	All	26.26	18.07	18.44	-7	30.40
Female White		25.50	23.19	23.84	-1	
	Female White	34.08	22.21	19.63	-14	
Female Negro		31.17	28.21	26.72	-4	
	Female Negro	26.81	26.31	26.46	-0	
Male White		28.30	19.67	19.27	-9	
	Male White	31.30	14.30	12.77	-18	
Male Negro		26.45	14.13	14.43	-12	
	Male Negro	18.29	11.80	15.16	-3	
Females	Females	29.25	25.54	24.78	-4	
Males	Males	25.61	14.83	15.44	-10	
Whites	Whites	29.40	19.77	18.95	-10	
Negroes	Negroes	25.77	19.47	20.02	-5	
Grand Means		27.23	19.59		-7	
Adj. Coef.		.38				

Table 43

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 4: IDENTIFICATION WITH FATHER

RANGE: 0 (CLOSE IDENTIFICATION) to 200 (DISTANT IDENTIFICATION)

FAVORABLE	UNFAVORABLE	Mean Scores		Adjusted	Change	S D
		Pre Test	Post Test	Post Test		
All		25.71	19.70	19.65	-6	26.21
	All	25.31	15.91	15.97	-9	31.89
Female White		31.87	27.00	25.24	-6	
	Female White	21.96	23.93	24.91	+2	
Female Negro		27.58	20.93	20.36	-7	
	Female Negro	29.90	15.00	13.79	-16	
Male White		18.34	14.41	16.39	-1	
	Male White	27.36	13.07	12.56	-14	
Male Negro		24.36	17.57	17.89	-6	
	Male Negro	21.30	14.52	15.69	-5	
Females	Females	28.23	20.44	19.69	-8	
Males	Males	22.82	15.42	16.17	-6	
Whites	Whites	24.90	19.67	19.85	-5	
Negroes	Negroes	25.80	17.16	17.08	-8	
Grand Means		25.52	17.93		-7	
Adj. Coef.		.28				

Table 44

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION

COMPARED WITH

STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 5: CENTRALITY

ALTERNATIVES: 1 (SELF IS CENTRAL) or 2 (FRIEND IS CENTRAL)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.38	1.46	1.46	+.08
	All	1.33	1.44	1.44	+.11
Females White		1.37	1.44	1.44	+.07
	Female White	1.29	1.46	1.46	+.17
Female Negro		1.37	1.44	1.44	+.07
	Female Negro	1.42	1.39	1.39	-.03
Male White		1.35	1.57	1.57	+.22
	Male White	1.30	1.57	1.57	+.27
Male Negro		1.40	1.40	1.40	±.00
	Male Negro	1.29	1.40	1.40	+.11
Females	Females	1.37	1.43	1.43	+.06
Males	Males	1.34	1.47	1.47	+.13
Whites	Whites	1.33	1.52	1.52	+.19
Negroes	Negroes	1.37	1.41	1.41	+.04
Grand Means		1.36	1.45		+.09
Adj. Coef.		-.00			

PRE TO POST RESPONSE	POSITIVES	NEGATIVES
Shifted 1 to 2	57	54
Stayed 1 to 1	89	91
Stayed 2 to 2	39	36
Shifted 2 to 1	61	50

5625

Table 45

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 5: CENTRALITY

ALTERNATIVES: 1 (SELF IS CENTRAL) or 2 (FRIEND IS CENTRAL)

FAVORABLE	UNFAVORABLE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change
All		1.42	1.40	1.40	-.02
	All	1.37	1.37	1.37	±.00
Female White		1.44	1.47	1.47	+.03
	Female White	1.43	1.36	1.36	-.07
Female Negro		1.39	1.40	1.40	+.01
	Female Negro	1.38	1.24	1.24	-.12
Male White		1.44	1.28	1.28	-.16
	Male White	1.43	1.54	1.54	+.11
Male Negro		1.44	1.42	1.42	-.02
	Male Negro	1.30	1.44	1.44	+.14
Females	Females	1.40	1.35	1.35	-.05
Males	Males	1.39	1.42	1.42	+.03
Whites	Whites	1.43	1.41	1.41	-.02
Negroes	Negroes	1.38	1.38	1.38	±.00
Grand Means		1.40	1.39		-.01
Adj. Coef.		.00			

PRE TO POST RESPONSE	FAVORABLE	UNFAVORABLE
Shifted 1 to 2	54	54
Stayed 1 to 1	89	91
Stayed 2 to 2	39	36
Shifted 2 to 1	61	50

5626

basis of sex and racial group cells. Female Negro students of the negatively perceiving teachers showed the only mean change away from self-centrality (+.03). A pattern observed in the mean cell changes of students compared on the basis of teacher attitude was that female students of the teachers with the more favorable attitude and male students of the teachers with the less favorable attitude moved away from self-centrality, while the male students of the teachers with the more favorable attitude and the female students of the teachers with the less favorable attitude changed toward higher centrality; this shows a distinct interaction of teacher attitude with sex of student.

Task 6 -- Identification with Adults -- Tables 46 and 47. Nonparametric analysis showed that more students with teachers of relatively positive perception (12%) than students with teachers of relatively negative perception (8%) shifted to non-identification with adults. The same type of analysis applied on the basis of teacher attitude showed that more students of teachers with a less favorable attitude toward the poor (22%) shifted toward positive identification than did students of teachers with a more favorable attitude (15%). However, it should be noted that two-thirds of the students generally, regardless of teacher characteristic, gave a posttest response indicative of positive identification (see Table 8), and the mean scores and changes of students divided on the two bases of teacher perception and attitude of students (see Tables 44 and 45) suggest common group tendencies toward positive identification.

5627

Table 46

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION
COMPARED WITH
STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 6: IDENTIFICATION WITH ADULTS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

POSITIVE	NEGATIVE	Mean Scores		Adjusted	Change	S D
		Pre Test	Post Test	Post Test		
All		1.45	1.36	1.36	-.09	.47
	All	1.45	1.28	1.28	-.17	.50
Female White		1.53	1.41	1.38	-.15	
	Female White	1.75	1.42	1.31	-.44	
Female Negro		1.46	1.29	1.29	-.17	
	Female Negro	1.39	1.33	1.36	-.03	
Male White		1.42	1.45	1.46	+.04	
	Male White	1.53	1.27	1.24	-.29	
Male Negro		1.42	1.33	1.35	-.07	
	Male Negro	1.29	1.18	1.24	-.05	
Females	Females	1.51	1.35	1.33	-.18	
Males	Males	1.41	1.31	1.32	-.09	
Whites	Whites	1.54	1.39	1.36	-.18	
Negroes	Negroes	1.39	1.29	1.31	-.08	
Grand Means		1.45	1.33		-.12	
Adj. Coef.		.36				

PRE TO POST RESPONSE	POSITIVE	NEGATIVE
Shifted 1 to 2	26	18
Stayed 1 to 1	97	114
Stayed 2 to 2	57	50
Shifted 2 to 1	46	49

5628

Table 47
STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR
COMPARED WITH
STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 6: IDENTIFICATION WITH ADULTS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

FAVORABLE	UNFAVORABLE	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.41	1.33	1.34	-.07
	All	1.47	1.31	1.29	-.18
Female White		1.56	1.47	1.41	-.15
	Female White	1.61	1.32	1.25	-.36
Female Negro		1.42	1.29	1.30	-.12
	Female Negro	1.48	1.32	1.30	-.18
Male White		1.44	1.25	1.25	-.19
	Male White	1.43	1.32	1.32	-.11
Male Negro		1.32	1.35	1.40	+.08
	Male Negro	1.41	1.29	1.30	-.11
Females	Females	1.49	1.33	1.31	-.18
Males	Males	1.38	1.31	1.33	-.05
Whites	Whites	1.51	1.34	1.31	-.20
Negroes	Negroes	1.40	1.31	1.32	-.08
Grand Means		1.44	1.32		-.12
Adj. Coef.		.43			

PRE TO POST RESPONSE	FAVORABLE	UNFAVORABLE
Shifted 1 to 2	22	20
Stayed 1 to 1	122	108
Stayed 2 to 2	63	52
Shifted 2 to 1	36	51

White students of teachers with negative perception showed the strongest tendency to shift toward positive identification, females changing a mean of -.44, males -.29. Male white students of teachers of more positive perception were the only sex-race cell to average a mean change away from identification (+.04).

Female white students of the teachers with the more favorable attitude showed the highest average change toward positive identification (+.36) of cells compared on the basis of teacher attitude. Male Negro students of the teachers with the less favorable attitude evidenced the only change here away from identification (averaging a change of +.08).

Task 7 -- Identification with Peers -- Tables 48 and 49. Nonparametrics indicated that a slightly higher proportion of the students of the more positive teachers (11%) shifted away from identification with peers than did students of the negative teachers (8%), but a two-thirds majority of students of both types of teachers chose on the posttest the response indicative of positive identification with peers on this alternative response task. When compared on the basis of teacher attitude, more students of the teachers with the less favorable attitude shifted to positive identification on the posttest from a non-identification response on the pretest (22%) than did students of teachers with a more favorable attitude (18%), but again, substantial majorities (57% and 66%) of the students of both groups of teachers chose on the posttest the response indicative of positive identification with peers.

4630

Table 48

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION
COMPARED WITH
STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 7: IDENTIFICATION WITH PEERS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		1.51	1.41	1.40	-.11	.48
	All	1.42	1.33	1.34	-.08	.50
Female White		1.47	1.53	1.53	+.06	
	Female White	1.54	1.42	1.39	-.15	
Female Negro		1.54	1.29	1.27	-.27	
	Female Negro	1.44	1.42	1.53	-.01	
Male White		1.57	1.47	1.44	-.13	
	Male White	1.53	1.40	1.38	-.15	
Male Negro		1.47	1.40	1.40	-.07	
	Male Negro	1.27	1.16	1.23	-.04	
Females	Females	1.50	1.40	1.39	-.11	
Males	Males	1.45	1.35	1.36	-.09	
Whites	Whites	1.53	1.46	1.44	-.09	
Negroes	Negroes	1.43	1.32	1.33	-.10	
Grand Means		1.47	1.37			
Adj. Coef.		.36				

PRE TO POST RESPONSE	POSITIVE	NEGATIVE
Shifted 1 to 2	24	19
Stayed 1 to 1	84	105
Stayed 2 to 2	72	60
Shifted 2 to 1	46	47

5631

Table 42
STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR
COMPARED WITH
STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 7: IDENTIFICATION WITH PEERS

ALTERNATIVES: 1 (POSITIVE IDENTIFICATION) or 2 (NON-IDENTIFICATION)

FAVORABLE	UNFAVORABLE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change
All		1.45	1.35	1.34	-.11
	All	1.43	1.32	1.32	-.11
Female White		1.59	1.47	1.40	-.19
	Female White	1.43	1.39	1.40	-.03
Female Negro		1.42	1.29	1.30	-.08
	Female Negro	1.48	1.32	1.30	-.18
Male White		1.47	1.44	1.43	-.04
	Male White	1.46	1.32	1.31	-.15
Male Negro		1.42	1.31	1.32	-.10
	Male Negro	1.38	1.29	1.31	-.07
Females	Females	1.47	1.34	1.33	-.14
Males	Males	1.42	1.32	1.33	-.09
Whites	Whites	1.49	1.41	1.39	-.10
Negroes	Negroes	1.42	1.30	1.31	-.11
Grand Means		1.44	1.33		-.11
Adj. Coef.		.43			

PRE TO POST RESPONSE	FAVORABLE	UNFAVORABLE
Shifted 1 to 2	19	19
Stayed 1 to 1	112	107
Stayed 2 to 2	69	54
Shifted 2 to 1	43	51

5632

An exception to the tendency of groups of students to shift toward positive identification with peers was found in the female white students of the more positive teachers, who changed, as a group, toward non-identification (a mean of +0.04).

Task 8 -- Self-Esteem -- Tables 50 and 51. Mean scores indicated a tendency of students of teachers of more positive perception to change toward higher self-esteem more so than students of the relatively negative teachers (mean changes being -0.26 and -0.09 respectively on this 1 to 5 scale). A similar difference was noted between students of teachers with more favorable attitudes, who averaged a greater change (-0.28) toward higher self-esteem than did students of teachers with less favorable attitudes (who averaged a change of +0.01).

Considerable contrasts between sex-race cells of like students of the teachers compared were evident, with the interaction of teacher perception and sex of student being significant at the .05 level (F = 5.36). Female students of the more positively perceiving teachers changed relatively little in the case of female whites (averaging -0.09) and toward lower self-esteem, in the case of the female Negroes (+0.32). Female students of the teachers of relatively negative perception changed considerably toward higher self-esteem, female whites averaging -0.38, female Negroes -0.32. The direction differences between the two groups of females were reversed by the males of the same type teachers;

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Table 50

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION
COMPARED WITH
STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 8: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

POSITIVE	NEGATIVE	Mean Scores Pre Test	 Post Test	Adjusted Post Test	Change	S D
All		3.24	2.98	2.98	-.26	1.62
	All	3.17	3.07	3.08	-.09	1.69
Female White		3.03	2.91	2.94	-.09	
	Female White	3.21	2.83	2.83	-.38	
Female Negro		3.04	3.33	3.36	+.32	
	Female Negro	3.14	2.81	2.82	-.32	
Male White		3.75	2.87	2.78	-.97	
	Male White	2.87	3.23	3.29	+.42	
Male Negro		3.17	2.82	2.82	-.35	
	Male Negro	3.38	3.31	3.28	-.10	
Females	Females	3.09	3.01	3.04	-.05	
Males	Males	3.30	3.03	3.01	-.29	
Whites	Whites	3.25	2.96	2.95	-.30	
Negroes	Negroes	3.18	3.06	3.07	-.11	
Grand Means		3.21	3.02		-.19	
Adj. Coef.		.18				

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Table 51

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 8: SELF ESTEEM

RANGE: 1 (HIGH SELF ESTEEM) to 5 (LOW SELF ESTEEM)

FAVORABLE	UNFAVORABLE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		3.24	2.98	2.96	-.28	1.59
	All	2.93	2.91	2.94	+.01	1.67
Female White		2.91	2.59	2.63	-.28	
	Female White	3.11	2.39	2.39	-.72	
Female Negro		3.26	3.31	3.28	+.02	
	Female Negro	2.97	3.03	3.05	+.08	
Male White		3.22	2.50	2.48	-.74	
	Male White	2.82	2.57	2.62	-.20	
Male Negro		3.37	3.04	2.99	-.38	
	Male Negro	2.86	3.16	3.20	+.34	
Females	Females	3.09	2.97	2.97	-.12	
Males	Males	3.10	2.92	2.92	-.18	
Whites	Whites	3.02	2.52	2.53	-.49	
Negroes	Negroes	3.13	3.14	3.13	±.00	
Grand Means		3.09				
Adj. Coef.		.17				

the male students of the more positive teachers were the ones to change more toward higher self-esteem, male white students of the more positive teachers changing an average of -0.97, male Negro students of these teachers an average of -0.35. Male students of the negative teachers changed in degrees comparable to the female students of the more positive teachers, male white students of the negative teachers changing a mean of +0.42, male Negroes -0.10.

Several cell differences based on teacher attitude were remarkable. Negro students of the teachers with the less favorable attitude toward the poor changed distinctly toward lower self-esteem (females a mean of +0.08, males +0.34), the white students of these teachers having changed distinctly toward higher self-esteem (females a mean of -0.72, males -0.20). Within the students of teachers of a more favorable attitude, males changed considerably more (whites a mean of -0.74, Negroes -0.38) than females (whites -0.28, Negroes +0.02).

Task 9 -- Power with Teacher -- Tables 52 and 53. Cell means indicated some different effects of teacher perception as measured by this task. Especially remarkable was the interaction of relative teacher perception and sex of student (F = 8.50, significant at the .01 level). While the female white students of the more positive teachers changed a marked degree toward more power (a mean of +0.18), the female Negro students of these same teachers changed slightly in the opposite direction (a mean of -0.06). The male white students of the more positively perceiving teachers moved considerably toward less power while the male Negroes moved moderately in the same direction. Thus, female students of the more positive teachers tended to change little, male students of these teachers markedly toward lowered power. On the other hand, female students of the more negative teachers, although showing a racial difference of considerable spread (female whites changing a mean of +0.06, female Negroes -0.66), averaged a greater change toward lower power than did the male students of these relatively negative teachers (the male whites effecting a mean change of -0.29, the male Negroes +0.10).

Students of teachers with a less favorable attitude tended to change more toward less power than students of teachers with a more favorable attitude (mean changes being -0.17 and -0.13 respectively). Particularly pronounced were the differences between the Negro students of the two groups of teachers; an interaction of teacher attitude and sex of students appeared in the case of Negroes but not in the case of whites. Female Negro students of teachers with the more favorable attitudes changed little (a mean of +0.01), but toward more power, while the male Negro students of these teachers changed toward less power (a mean of -0.20). The female Negro students of teachers with less

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Table 52

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION
COMPARED WITH
STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION
TASK 9: POWER WITH TEACHER

RANGE: 1 (TEACHER MORE POWERFUL) to 5 (SELF MORE POWERFUL)

POSITIVE	NEGATIVE	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S D
All		3.11	2.91	2.90	-.21	1.38
	All	2.99	2.78	2.79	-.20	1.37
Female White		2.91	3.06	3.09	+.18	
	Female White	2.58	2.54	2.64	+.06	
Female Negro		3.27	3.25	3.21	-.06	
	Female Negro	3.17	2.53	2.51	-.66	
Male White		3.02	2.37	2.38	-.64	
	Male White	3.20	2.93	2.91	-.29	
Male Negro		3.15	2.90	2.88	-.27	
	Male Negro	2.93	3.00	3.03	+.10	
Females	Females	3.04	2.90	2.90	-.14	
Males	Males	3.07	2.81	2.81	-.26	
Whites	Whites	2.95	2.71	2.74	-.21	
Negroes	Negroes	3.13	2.94	2.93	-.20	
Grand Means		3.06	2.85		-.21	
Adj. Coef.		.20				

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Table 53

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 9: POWER WITH TEACHER

RANGE: 1 (TEACHER MORE POWERFUL) to 5 (SELF MORE POWERFUL)

FAVORABLE	UNFAVORABLE	Mean Scores Pre Test	 Post Test	Adjusted Post Test	Change	S D
All		3.09	2.93	2.94	-.13	1.40
	All	3.13	2.97	2.96	-.17	1.40
Female White		2.97	2.87	2.90	-.07	
	Female White	2.79	2.57	2.62	-.17	
Female Negro		3.14	3.15	3.15	+.01	
	Female Negro	3.30	3.06	3.03	-.27	
Male White		3.09	2.56	2.56	-.53	
	Male White	3.14	2.50	2.50	-.64	
Male Negro		3.10	2.90	2.90	-.20	
	Male Negro	3.11	3.25	3.25	+.14	
Females	Females	3.11	2.99	2.99	-.12	
Males	Males	3.11	2.90	2.90	-.21	
Whites	Whites	3.00	2.63	2.65	-.35	
Negroes	Negroes	3.16	3.09	3.08	-.08	
Grand Means		3.11	2.95		-.16	
Adj. Coef.		.15				

favorable attitudes changed toward lower power (-0.27), while the male Negro students of these teachers changed toward more power (the mean change being +0.14).

Task 10 -- Power with Policeman -- Tables 54 and 55. The difference on this task between students of the relatively positive and negative teachers was statistically significant, and commented upon earlier as a pronounced difference in adjusted posttest scores, students of the more positive teachers averaging 3.07, those of the negative teachers 2.75. The difference in change was also pronounced, the former changing a mean of -0.05, the latter students a mean of -0.20. The mean adjusted posttest scores of students divided on the basis of teacher attitude was less remarkable; students of teachers with the more favorable attitude having a mean score of 3.01, those of teachers with the less favorable attitude a mean score of 2.88. The average change (+0.07 in the case of the former, -0.02 in the case of the latter) is ambiguous, however, cell changes for different sex-race cells taking different directions, which will be considered below.

Cell differences between students of the positively and negatively perceiving teachers were greater than the overall changes, with the exception of one pair (male whites). Female whites with more positive teachers changed toward lower power (a mean of -0.16), while those of the negative teachers changed toward more power (+0.19). Female Negroes generally changed

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toward lower power, but those of the more positive teachers less so (a mean of -0.24) than those of the negative teachers (mean of -0.60). Male Negro students changed in opposite directions, but in a way reverse that of the female whites mentioned above. Male Negro students of the more positive teachers changed toward higher power (a mean of +0.23), those of the relatively negative teachers toward lower power (a mean of -0.18). It should be noted further that the male Negro students of the more positive teachers were the only sex-race cell of these teachers to move from pretest to posttest to a score indicative of higher power; the female white students of the relatively negative teachers were the only sex-race cell of these teachers to move in this manner.

Remarkable differences between students of teachers with favorable and unfavorable attitudes were noted in three of the sex-race cell pairs; only female whites showed little difference due to teacher attitude. Female Negro and white male students of teachers with more favorable attitudes changed toward more power (mean changes being +0.07 and +0.17), while their sex and racial group counterparts with teachers having an unfavorable attitude changed toward less power (mean changes being -0.23 and -0.15). Male Negroes moved in the opposite direction; those with teachers having a more favorable attitude changed a mean of -0.01, those with teachers having an unfavorable attitude +0.15.

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Table 54

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION
COMPARED WITH
STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 10: POWER WITH POLICEMAN

RANGE: 1 (POLICEMAN MORE POWERFUL) to 5 (SELF MORE POWERFUL)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Mean Scores Post Test	Adjusted Post Test	Change	S D
All		3.12	3.08	3.07	-.05	1.37
	All	2.95	2.73	2.75	-.20	1.32
Female White		3.28	3.16	3.12	-.16	
	Female White	2.58	2.71	2.77	+.19	
Female Negro		3.23	3.02	2.99	-.24	
	Female Negro	2.97	2.36	2.37	-.60	
Male White		2.90	2.72	2.75	-.15	
	Male White	2.90	2.80	2.82	-.08	
Male Negro		3.08	3.32	3.31	+.23	
	Male Negro	3.16	3.00	2.98	-.18	
Females	Females	3.06	2.83	2.83	-.23	
Males	Males	3.03	3.01	3.01	-.02	
Whites	Whites	2.94	2.85	2.86	-.08	
Negroes	Negroes	3.12	2.98	2.97	-.15	
Grand Means		3.04	2.93		-.11	
Adj. Coef.		.14				

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Table 55

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 10: POWER WITH POLICEMAN

RANGE: 1 (POLICEMAN MORE POWERFUL) to 5 (SELF MORE POWERFUL)

FAVORABLE	UNFAVORABLE	Mean Scores		Adjusted		
		Pre Test	Post Test	Post Test	Change	S D
All		2.94	3.01	3.01	+.07	1.35
	All	2.90	2.88	2.88	-.02	1.33
Female White		2.75	2.87	2.89	+.14	
	Female White	2.68	2.86	2.88	+.20	
Female Negro		2.90	2.97	2.97	+.07	
	Female Negro	3.06	2.84	2.83	-.23	
Male White		2.69	2.84	2.86	+.17	
	Male White	2.61	2.43	2.46	-.15	
Male Negro		3.18	3.19	3.17	-.01	
	Male Negro	2.97	3.13	3.12	+.15	
Females-	Females	2.90	2.90	2.90	±.00	
Males	Males	2.95	3.01	3.00	+.05	
Whites	Whites	2.68	2.76	2.78	+.10	
Negroes	Negroes	3.03	3.04	3.03	±.00	
Grand Means		2.92	2.95		+.03	
Adj. Coef.		.09				

Task 11 -- Individuation -- Tables 56 and 57. Nonparametric analysis of this task suggested a shift of slightly more students of the positively perceiving teachers (18%) toward higher individuation than of students of the relatively negative teachers (15%). Students of teachers with the more favorable attitude appeared somewhat more changeable generally, 20% changing toward greater individuation, in comparison with 16% of the students of teachers with unfavorable attitudes, while 22% of the favorable teacher attitude students shifted on this alternative response task toward less individuation from pre- to posttest, in comparison with 19% of the students of unfavorable attitude teachers.

Consideration of tables of mean scores and cell changes for this task suggested that students of the negatively perceiving teachers changed slightly more (a mean of +0.08) than did students of the more positive teachers (mean of +0.01) toward less individuation. The highest cell mean was that of the male white students of the negatively perceiving teachers (1.50, which can be compared with the grand mean post score of 1.40), and their change (a mean of -0.17) was greatest of any sex-race cell of either teacher group.

Students of the teachers with a more favorable attitude changed slightly more (a mean of +0.06) than did students of teachers with a less favorable (or unfavorable) attitude (mean of +0.01). Most remarkable was the single change toward higher individuation, effected by the female white students of the teachers with the more favorable attitude.

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Table 56

STUDENTS OF TEACHERS WITH POSITIVE PERCEPTION

COMPARED WITH

STUDENTS OF TEACHERS WITH NEGATIVE PERCEPTION

TASK 11: INDIVIDUATION

ALTERNATIVES: 1 (SELF SAME AS OTHERS) or 2 (SELF DIFFERENT FROM OTHERS)

POSITIVE	NEGATIVE	Mean Scores Pre Test	Post Test	Adjusted Post Test	Change
All		1.38	1.39	1.39	+.01
	All	1.34	1.41	1.42	+.08
Female White		1.44	1.44	1.43	-.01
	Female White	1.42	1.42	1.41	-.01
Female Negro		1.35	1.40	1.40	+.05
	Female Negro	1.25	1.33	1.35	+.10
Male White		1.27	1.32	1.34	+.07
	Male White	1.33	1.50	1.50	+.17
Male Negro		1.43	1.42	1.41	-.02
	Male Negro	1.38	1.43	1.42	+.04
Females	Females	1.36	1.39	1.39	+.03
Males	Males	1.37	1.41	1.41	+.04
Whites	Whites	1.36	1.41	1.41	+.05
Negroes	Negroes	1.37	1.40	1.40	+.03
Grand Means		1.36	1.40		+.04
Adj. Coef.		.16			

PRE TO POST RESPONSE	POSITIVE	NEGATIVE
Shifted 1 to 2	46	56
Stayed 1 to 1	94	99
Stayed 2 to 2	45	42
Shifted 2 to 1	41	34

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Table 57

STUDENTS OF TEACHERS WITH FAVORABLE ATTITUDE TOWARD THE POOR

COMPARED WITH

STUDENTS OF TEACHERS WITH UNFAVORABLE ATTITUDE TOWARD THE POOR

TASK 11: INDIVIDUATION

ALTERNATIVES: 1 (SELF SAME AS OTHERS) or 2 (SELF DIFFERENT FROM OTHERS)

FAVORABLE	UNFAVORABLE	Mean Scores		Adjusted	
		Pre Test	Post Test	Post Test	Change
All		1.38	1.39	1.39	+.01
	All	1.35	1.41	1.41	+.06
Female White		1.37	1.31	1.31	-.08
	Female White	1.43	1.46	1.45	+.02
Female Negro		1.37	1.37	1.37	±.00
	Female Negro	1.32	1.46	1.47	+.15
Male White		1.34	1.44	1.44	+.10
	Male White	1.39	1.39	1.39	±.00
Male Negro		1.40	1.42	1.41	+.01
	Male Negro	1.32	1.33	1.34	+.02
Females	Females	1.36	1.41	1.41	+.05
Males	Males	1.36	1.39	1.39	+.03
Whites	Whites	1.38	1.40	1.40	+.02
Negroes	Negroes	1.36	1.40	1.40	+.04
Grand Means		1.36	1.40		+.04
Adj. Coef.		.22			

The Development of Trust

Analysis of variance of the effect of the Head Start program upon expressed trust of the children, as measured by the test of sharing, yielded a statistical significance for the change at the .01 level. The pre- to posttest difference in number of children sharing was likewise statistically significant at the .01 level for each of the racial groups.

In the pretest, 55% of the white students gave evidence of trust of their test companions, and in the posttest, only 20% of the white students gave such an indication. Twenty percent of the pretested Negroes gave evidence of trust, while only 5% of them gave such an indication in the posttest. Of all students tested, disregarding racial group, 38% showed trust in the pretest, 18% in the posttest.

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IV DISCUSSION

It is reasonable to assume that even the most enthusiastic supporter of Project Head Start would not expect significant and pervasive changes to occur in self and self-other constructs of Head Start children on only eight weeks exposure. The analyses, of course, support this expectation. Using the most conservative statistical approaches, significant differences were found for some variables and variable interactions and none for many others. Also important, however, in light of the brief Head Start exposure, are trends which shed light on project effectiveness in this area and are therefore included in the discussion.

Development of Self-Social Constructs

Results of the analyses together with trends perceived in group changes generally support the notion that the Head Start experience has some positive effect on the self and self-other constructs of Head Start children. The most significant impact is in the student-teacher relationship where students increasingly identify with the teacher and, at the same time, see her as less threatening, less all-powerful. This tendency toward a balanced power perception of the teacher as an authority figure was also found for the other non-family, student-authority relationship measured, the policeman. In addition, Head Start children shifted significantly toward a perception of self as similar to others as opposed to self as different from others. While individuation from both a theoretical and a behavioral position is a prerequisite to positive self development, it is interesting to speculate that Head Start children, with their impoverished self experiences, need to perceive themselves as similar to other people in order to gain the self security necessary for individuation. This postulated need for self security is supported in part by the tendency of Head Start children to maintain self as more central than controls.

From our findings we can generate a composite picture of Head Start children who, as a result of their experience, begin to see themselves as similar to other children and not secure enough to move from a self position central in the universe. At the same time, however, positive interpersonal relationships with authority figures in the Head Start program promoted identification with those figures and, as a result, self is extended vis-a-vis a relative power balance between conforming self centrality versus self extension toward significant others may in part help explain the conflicting findings concerning self-esteem. In one measure a tendency of Head Start students toward higher self-esteem was observed while controls shifted to lesser self-esteem. In another measure, the converse was observed.

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With respect to the variables of sex and race, it can be generalized that those children who appeared to gain the most from their Head Start experience in the development of self and self-other constructs were white females. Those children who changed little, if at all, in their self and self-other constructs were Negro males. White male and Negro female children fell somewhere between those two groups in their development. This may indicate that the Head Start experience is essentially an extension of the female-dominated elementary school.

Certainly other factors support this idea. Over 50 percent of our teachers reported elementary school teaching experience. For most centers, administrators and supporting personnel were school people. In addition, most of the classes were held in public schools.

The entire area of teacher, sex, background, and race, with respect to student self and self-other development, however, has yet to be analyzed.

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Effect of Teachers' Cognitive Styles

When students of conceptually abstract and highly complex teachers are measured against students of conceptually concrete and relatively less complex teachers with regard to the development of self and self-other constructs, a pattern emerges similar to that found for the tests of students versus controls. In general, students of abstract and complex teachers gained in self-esteem, identified more closely with mother, developed a more balanced power perception of teacher and police figures and perceived themselves as similar to others. The converse holds for those students of concrete and less complex teachers.

It may be hypothesized that abstract and complex teachers have the ability to provide a significant number of environmental alternatives for their children thus generating greater behavioral freedom to explore self and self-other relationships. Concrete and less complex teachers tend to develop environmental routines which encourage conformity in interpersonal relationships. Sex and race variables tend to follow the general pattern with few exceptions.

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Effect of Teachers' Perceptions

An interesting pattern emerges from an analysis of student social-construct change when teachers are differentiated on the basis of either a general attitude toward the poor or on an expressed perception of a disliked student. Significant teacher-sex and teacher-race interactions suggest that teachers' perceptions have the most effect on Negro male students and little or no effect on female white students. Female Negro students and male whites show a mixed pattern, falling somewhere between those two groups. Male Negro students of teachers who are relatively less positive in their attitudes about the poor and in their perceptions of disliked students identify less closely with their teachers, feel more assertive with respect to authority figures and are lower in their self-esteem. The converse holds for male Negro students with relatively more positive teachers. There is a tendency for males in general to be affected by teacher attitude. Self-esteem, balance of power, and self centrality increases for males under positive teachers while decreases are found for males under less positive teachers. This suggests that those students typically distant from the

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institutional concurrent norm are more sensitive to teacher attitude with a defense of self-social constructs. Those students typically within the norm are more secure and open to change under a wide variety of attitudinal pressures.

Development of Trust

A cursory review of the sharing experiment results might lead one to assume that Head Start experiences, far from supporting the development of social trust, were actually detrimental to trust development. From pre- to posttest, a general decrease of sharing was noted for all students. However, it must be noted that norms from other studies of pre-school sharing behavior (Ugurel-Semin, 1952; Handlon & Gross, 1958), show that the posttest results represent typical pre-school behavior. This suggests that as a result of their limited experiences with objects and people, Head Start children initially had unrealistic perceptions of the sharing situation. As a result of the daily interpersonal give and take in Head Start, more nearly normal, realistic perceptions and attitudes were developed with regard to social trust. While indeed the

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tendency for Head Start pupils to share decreased during the program, this can be regarded as a desirable result since it points to the increasing typicality of the pupils.

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V SUMMARY

Background of the Study

A fundamental assumption of Project Head Start is that economic deprivation is often associated with a reduced number of connections between the child and other people and between the child and objects; and that these limited connections with objects and people provide an inadequate experiential background for associating words and concrete events, thereby retarding the learning process as it is now programmed. It is apparent that Project Head Start was conceived, in part, to ameliorate certain effects economic deprivation has had upon children with respect to their feelings about self and their quality of relationships between self and others.

Objective

It was the objective of this study to investigate whether Project Head Start would produce positive changes in self and self-other relationships, and, as a means of differentiating program effectiveness, to investigate the relationship between certain characteristics of Head Start

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teachers and self and self-other changes in their students. Specifically, four questions were asked:

(1) Would the development of self-social constructs of children participating in Head Start differ from the development of children in a control group?

(2) Would the teachers' cognitive styles affect the development of self-social constructs?

(3) Would the teachers' perceptions of Head Start children affect the development of self-social constructs?

(4) Would children participating in Head Start develop appropriate social trust?

Procedure

Types of Data Gathered. The major instrument used to measure self and self-other relationships was a version of the Self-Social Symbols Tasks developed by Ziller, Alexander, and Long (1964). From this source, eleven tasks were selected on the basis of ease of task decision and degree of nonverbal involvement. These tasks measured self esteem, identification with mother, identification with teacher, identification with father, self centrality, individualism with respect to significant

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adults, individualism with respect to peers, social power with teacher, social power with police, and self differentiation. Measurement of social trust was determined by a sharing task.

Measurement of teacher characteristics included conceptual style, an indication of the individual's ability to process information and generate alternatives along a concrete-abstract continuum, self complexity, perception of disliked students, and attitude toward the poor.

Data Collection. The geographical area involved in the project was the state of Delaware, in which 28 Child Development Centers operated with 92 teachers, supporting administrators, and assistants for approximately 1400 children. Testing of the children individually was done at the centers by a team of 12 college graduates during the first and last two weeks of Project Head Start. Testing of social trust was done by an elementary school teacher at the same time. Teacher characteristics were measured during two week-long training sessions held at the University of Delaware prior to the start of the Head Start program at the Centers. The tests were administered by the project director in his role as a director of the training program.

Samples. The students tested comprised somewhat more than two-thirds of all those involved in the Delaware Head Start program. For purposes of this report, the sample of students was reduced by eliminating those of teachers who either had not participated in the teacher training program or had not completed all the tests administered during that program to an N of 770. One hundred controls for the Head Start group were selected by the twelve field testers with advice and assistance from Center administrators. Many of the controls were children not enrolled in Head Start because of lack of Center capacity while others were domiciled too far from the Centers. All controls contacted were made available for this project. These children were tested at their homes during the same time periods Head Start children were tested. Of 94 teachers in the Delaware Head Start program, four did not participate in the training program and were not tested. Two of the trained and tested teachers dropped out of the program during the first two weeks. In addition, although present for most of the

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training, four teachers were absent for several of the tests administered during the training period. Thus, 84 (or 91%) of the teachers who participated for the full term in Delaware Head Start were available for analysis. The social trust sample consisted of 80 pairs of children tested during the first two weeks and 20 pairs tested during the last two weeks randomly selected from Head Start Centers in the Wilmington-Newark area.

Experimental Design. Given experimental and control groups with pretest and posttest scores but without pre-experimental sampling equivalence, the appropriate research design is called by Campbell and Stanley (1963), a "non-equivalent control group design", a quasi-experimental design. With this design a co-variance analysis using pretest means as the covariate is suggested.

Statistical Analysis. Multiple-regression, co-variance, and analysis of variance programs were adapted to the SDS 9300 from the MULTR, COVAR, and ANOVA programs contained in Cooley and Lohnes (1962). In general, analyses of covariance (ANOVA) were used to determine the significance of differences both in the Head Start versus controls on all tasks as well as between Head Start students of teachers one-half standard deviation above or below the means on characteristics of conceptual style, self-complexity, perception of disliked students and attitude toward the poor. For those tasks where nonparametric statistics were appropriate, student responses, as frequencies, were cast into

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McNemar's (1955) categories for determining significance of change. A chi^2 test for independent samples was first computed. If significant, then McNemar's test was applied to each group to determine significance of change.

Results and Conclusions

1. Results of the analyses together with trends perceived in group changes generally support the notion that the Head Start experience has a positive effect on the self and self-other constructs of Head Start children.

2. The most significant impact is in the student-teacher relationship where students increasingly identify with the teacher and, at the same time, see her as less threatening, less all-powerful.

3. The tendency toward a balanced power perception of the teacher as an authority figure was also found for the other non-family, student-authority relationship measured, student-policeman.

4. Head Start children shifted significantly toward a perception of self as similar to others as opposed to self as different from others. While individuation is considered a prerequisite to positive self development, it was suggested that Head Start children, with their impoverished self experience, need to perceive themselves as similar to other people in order to gain the self security necessary for individuation.

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5. There is a tendency for Head Start children to maintain self as more central than controls.

6. With respect to the variables of sex and race, it is generalized that those children who appeared to gain the most from their Head Start experience in the development of self and self-other constructs were white females. Those children who changed little, if at all, in their self and self-other constructs were Negro males. White male and Negro female children fell somewhere between those two groups in their development.

7. In general, students of abstract and complex teachers gained in self-esteem, identified more closely with mother, developed a more balanced power perception of teacher and police figures and perceived themselves as similar to others. The converse holds for those students of concrete and less complex teachers.

8. Significant teacher-sex and teacher-race interactions suggest that teachers' perceptions have the most effect on Negro male students and little or no effect on female white students. Female Negro students and white males show a mixed pattern, falling somewhere between those two groups.

9. Male Negro students of teachers who are relatively less positive in their attitudes about the poor and in their perceptions of disliked students identify less closely with their teachers, feel more assertive with respect to authority figures and are

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lower in their self-esteem. The converse holds for male Negro students with relatively more positive teachers.

10. There is a tendency for males in general to be affected by teacher attitude. Self-esteem, balance of power, and self centrality increases for males under positive teachers while decreases are found for males under less positive teachers.

11. Head Start children initially had unrealistic perceptions of the sharing situation. As a result of the daily interpersonal give and take in Head Start, more nearly normal, realistic perceptions and attitudes were developed with regard to social trust.

Question One. Development of self-social constructs of children participating in Head Start generally differ in positive directions from a similar development of children in a control group.

Question Two. Teachers' cognitive styles do affect the development of self-social constructs.

Question Three. Teachers' perceptions of Head Start children, as inferred from their attitudes toward the poor and perceptions of disliked students, do affect the development of self-social constructs.

Question Four. Children participating in Head Start did develop appropriate social trust.

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REFERENCES

Adler, A. *The practice and theory of individual psychology*. New York: Harcourt, 1927.

Ausubel, D. P. *Ego development and the personality disorders*. New York: Brune and Stratton, 1952.

Barron, F. An ego-strength scale which predicts response to psychotherapy. *J. Consult. Psychol*., 1953, *17*, 327-333.

Berger, E. M. The relations between expressed acceptance of self and expressed acceptance of others. *J. Abnorm. Soc. Psychol*., 1952, *47*, 778-782.

Campbell, D. T. and Stanley, J. C. Experimental and quasi-experimental designs for research on teaching. *Handbook of Research on Teaching*, 1963, 5, 171-241.

Cartwright, R. D. The effects of psychotherapy on self consistency. *J. Consult. Psychol*., 1961, *25*, 376-382.

Cooke, R. Memorandum to Mr. Sargent Shriver: Improving the opportunities and achievements of the children of the poor. Duplicated, Washington, D.C., 1965.

Cooley, W. W. and Lohnes, P. R. *Multivariate procedures for the behavioral sciences*. New York: Wiley, 1962.

Deutsch, M. The effect of motivational orientation upon trust and suspicion. *Human Rel*., 1958, 123-139.

Ehart, M. E. Cognitive complexity--simplicity in teacher's perceptions of pupils in relation to teaching effectiveness. Unpublished doctoral dissertation, Univ. of Ill., Urbana, Ill., 1956.

Erikson, E. H. *Identity and the life cycle*. New York: International Universities Press, 1959.

Fey, W. F. Acceptance by others and its relation to acceptance of self and others: a revaluation. *J. Abnorm. Soc. Psychol*., 1955, *50*, 274-276.

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Fiedler, F. E. The leader's psychological distance and group effectiveness. In D. Cartwright and A. Zonder (Eds.), Group Dynamics. New York: Row-Peterson, 1960, 586-606.

Freud, S. An outline of psychoanalysis. New York: Norton, 1949.

Guilford, J. P. Personality. New York: McGraw-Hill, 1959.

Handlon, B. J. and Gross, P. The development of sharing behavior. J. of Abnorm. Soc. Psychol., 1959, 425, 428.

Harvey, O. J., Hunt, D. E., and Schroder, H. M. Conceptual systems and personality organization. New York: Wiley, 1958.

Harvey, O. J., Hunt, D. E., and Schroder, H. M. Conceptual systems and personality organization. (2nd ed.) New York: Wiley, 1961.

Heider, F. The psychology of interpersonal relations. New York: Wiley, 1958.

Horney, K. Neurotic personality of our times. New York: Norton, 1937.

Joyce, B. R. A summary of exploratory research in education utilizing conceptual systems theory. Paper read at Amer. Educ. Res. Assoc., February, 1964.

Joyce, B. R., Lamb, H. E., and Sibol, J. Conceptual development and information-processing: a study of teachers. J. of Educ. Res. (in press)

Kelly, G. A. The psychology of personal constructs. New York: Norton, 1955.

Kuethe, J. L. Social schemas. J. Abnorm. Soc. Psychol., 1962, 64, 31-36.

Kuhn, M. H. Self attitudes by age, sex, and professional training. Sociolog. Quarterly, 1960, 1, 39-55.

Levy, D. M. Oppositional syndromes and oppositional behavior. In P. H. Hock and J. Zubin (Eds.), Psychopathology of Childhood. New York: Grune and Stratton, 1955, 204-226.

Long, B. H., Henderson, E. H., and Ziller, R. C. Developmental changes in the self-concept during middle childhood. Unpublished manuscript, Univ. of Del., 1964.

McNemar, Q. *Psychological statistics*. New York: Wiley, 1955.

Mead, G. H. *Mind, self and society*. Chicago: Univ. of Chicago Press, 1934.

Murray, H. A. *Explorations in personality*. New York: Oxford Univ. Press, 1938.

Office of Economic Opportunity. *An invitation to help project head start*, 1965.

Osgood, C. E., Suci, G. J., and Tannenbaum, P. H. *The measurement of meaning*. Urbana, Ill.: Univ. of Ill. Press, 1957.

Parsons, T. Family, structure and the socialization of the child. In T. Parsons and R. F. Bales (Eds.), *Family Socialization and Interaction Processes*. Glencoe, Ill.: The Free Press, 1955.

Phillips, E. L. Attitudes toward self and others: a brief questionnaire report. *J. Consult. Psychol.*, 1951, *15*, 79-81.

Rank, O. *Truth and reality*. New York: Knopf, 1936.

Sarbin, T. R. and Jones, D. S. An experimental analysis of role behavior. *J. Abnorm. Soc. Psychol.*, 1955, *51*, 236-241.

Schroder, H. M., Driver, M. J., and Streufert, S. Information processing systems in individuals and groups. Unpublished manuscript, Princeton Univ., 1964.

Sullivan, H. S. *The interpersonal theory of psychology*. New York: Norton, 1953.

Ugurel-Semin, R. Moral behavior and moral judgements of children. *J. of Abnorm. Soc. Psychol.*, 1952, *47*, 463-474.

Weinberg, C., Lamb, H., and McHugh, P. Educator alienation. Cooperative research proposal submitted to U. S. Commissioner of Education, 1964.

Wright, B. Altruism in children and the perceived conduct of others. *J. of Abnorm. Soc. Psychol.*, 1942, 37, 218-233.

Wylie, R. C. *The self concept*. Lincoln: Univ. of Nebr. Press, 1961.

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Ziller, R. C. Leader assumed dissimilarity as a measure of prejudicial cognitive style. J. of Applied Psychol., 1963, 48, 243-248.

Ziller, R. C., Alexander, M. B., and Long, B. H. Self social constructs and social desirability. Unpublished manuscript, Univ. of Del., 1964.

Ziller, R. C. and Long, B. H. Self and social constructs and geographic mobility. Unpublished manuscript, Univ. of Del., 1964.

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APPENDIX A

SELF-SOCIAL SYMBOLS TASKS

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Self-Social Symbols Tasks

(Non-Readers Form)

Today, I am going to ask you to do some things with some blocks of wood (like this). A little later I am going to ask you to do some things with pieces of paper that stick when you lick the back of them (like this). First, let us try the blocks.

Task 1

Here are some blocks. Now make believe that these blocks are people like your mother (touch a block), your father (touch another block), maybe a friend (touch another block), or maybe a brother or sister (touch another block). One of these blocks is _you_. That's right, _you_ (point). All right, now make a tall pile out of these blocks by placing one on top of the other, like this (pile one on top of the other and remove it again). Now, point to the block that is _you_. That's right, pretend one of the blocks is _you_. Which one is _you_? (Record on sheet 1 starting with one as the top block).

Task 2

Now here is a sticker. See how it sticks (show them). Look, there is a circle on the paper. Now make believe that the circle on the paper is _your mother_ (point to the circle). Take a _red_ sticker. Make believe that this red sticker is you. Yes, that is right. Make believe that the red sticker is you (point at him or her). Now lick the sticker. The sticker you just licked is *you*. Now place *you* or *yourself* anywhere on the paper. Place the sticker anywhere on the paper that you wish (sweep the sheet with your hand).

Task 3

Now look at the next page. There is a circle on this page (point to it). Make believe that this circle on the paper is *your teacher* (point to the circle). Take up another *red* sticker. Make believe that this red sticker is *you* (point at child). Lick the sticker. Remember that the sticker you just licked is *you*. Now put the sticker anyplace on the paper that you wish (sweep hand across the sheet of paper). All right, we are doing fine. Let's see what is on the next page.

Task 4

There is a circle on this page (point to it). Make believe that this circle (point to it again) is *your father*. Take up a *red* sticker. Make believe that his red sticker is *you*. Lick the back of the sticker and stick it any place on the paper. Remember this sticker is *you*.

Task 5

Turn the page. Here we will need two stickers. This *red* sticker is *you* (point to the red one); and this gold sticker (pointing to the gold one) is a boy or girl that you like. The gold sticker is someone who is your friend (point). First stick the red sticker on the paper. The red sticker is

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you. Then stick the gold sticker on the paper. The gold sticker is your friend. First, stick the red sticker; then stick the gold sticker. (Mark the one which is themselves).

Task 6

Here is another red sticker. Make believe the red sticker is you (point). Now look at the next sheet of paper. See the three circles. This one is your mother (point to top circle). This one is your father (point to middle circle). And this one is your teacher (point to bottom circle). Now lick the back of the red sticker. Remember the red sticker is you. Now place yourself anywhere on the paper.

Task 7

Here are three more little circles. Make believe that this little circle is a little boy that you know (point). Make believe that this (point) little circle is a little girl that you know. And make believe that this (point) is another friend of yours. Now, this red sticker is you. Lick the back of the sticker and stick it any place on this paper. Remember this sticker is you.

Task 8

Here are some little circles (point). Now make believe that these circles are people like your mother, your teacher, a friend, and someone you do not like very much. One of these circles is you (point). Now point to the circle that

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is you. (Record on the bottom of task 7, numbering one to five).

Task 9

Look at all the circles. Make believe that these circles are people. The circle in the center is you. Now make believe that one of these circles (point) is your teacher. Which circle do you think is your teacher? Put your finger on the circle that is your teacher (mark it).

Task 10

Here are some more circles. Make believe that these circles are people. The circle in the center is you. Now make believe that one of the other little circles around here (point) is a policeman. Which circle do you think is the policeman? Put your finger on the circle that is a policeman (mark it).

Task 11

Now look at all the little circles on this paper (point). Make believe that these circles are children or kids. These children are about as old as you are and as big as you are. Now one of these little circles or children is you. Which one do you think is you? Put your finger on the circle that is you (mark it).

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Task 12

Here are some more little circles. Make believe that these circles are children or kids. They are children who are going to school just like you. One of these little circles or children is you. Which one do you think is you? Put your finger on the circle that is you (Mark it).

THE END

Thank you very much,____________________. That was good.

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TASK ONE

PRETEST ____________ POSTTEST ____________

SELF-SOCIAL SYMBOLS

NAME: ______________________
First Last

AGE: ____________ SEX: ________ RACE: ____________
Years Months

TEACHER: ______________________

HEAD START CENTER NO. ____________ TESTER: ____________

S. E. = 1 2 3 4 5

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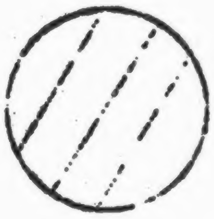
TASK TWO



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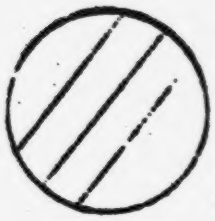
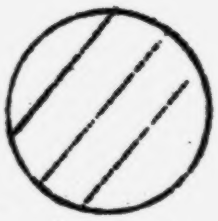
TASK THREE



TASK FOUR



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TASK FIVE

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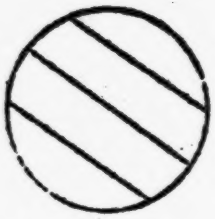
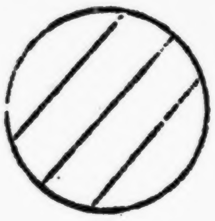
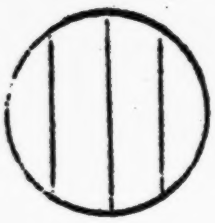
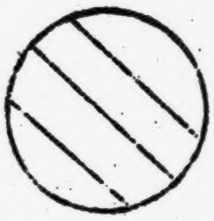
TASK SIX

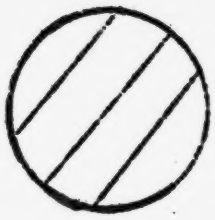


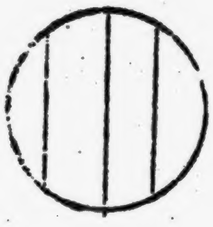




TASK SEVEN







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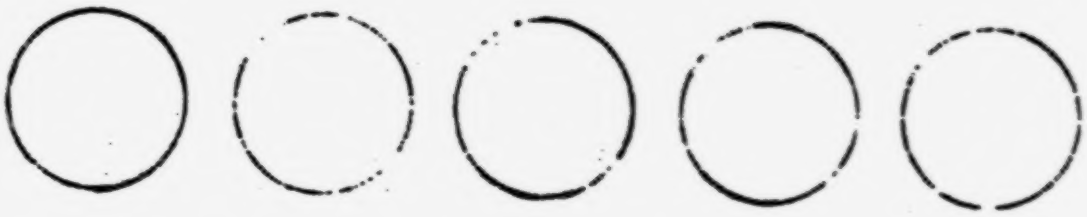
TASK EIGHT



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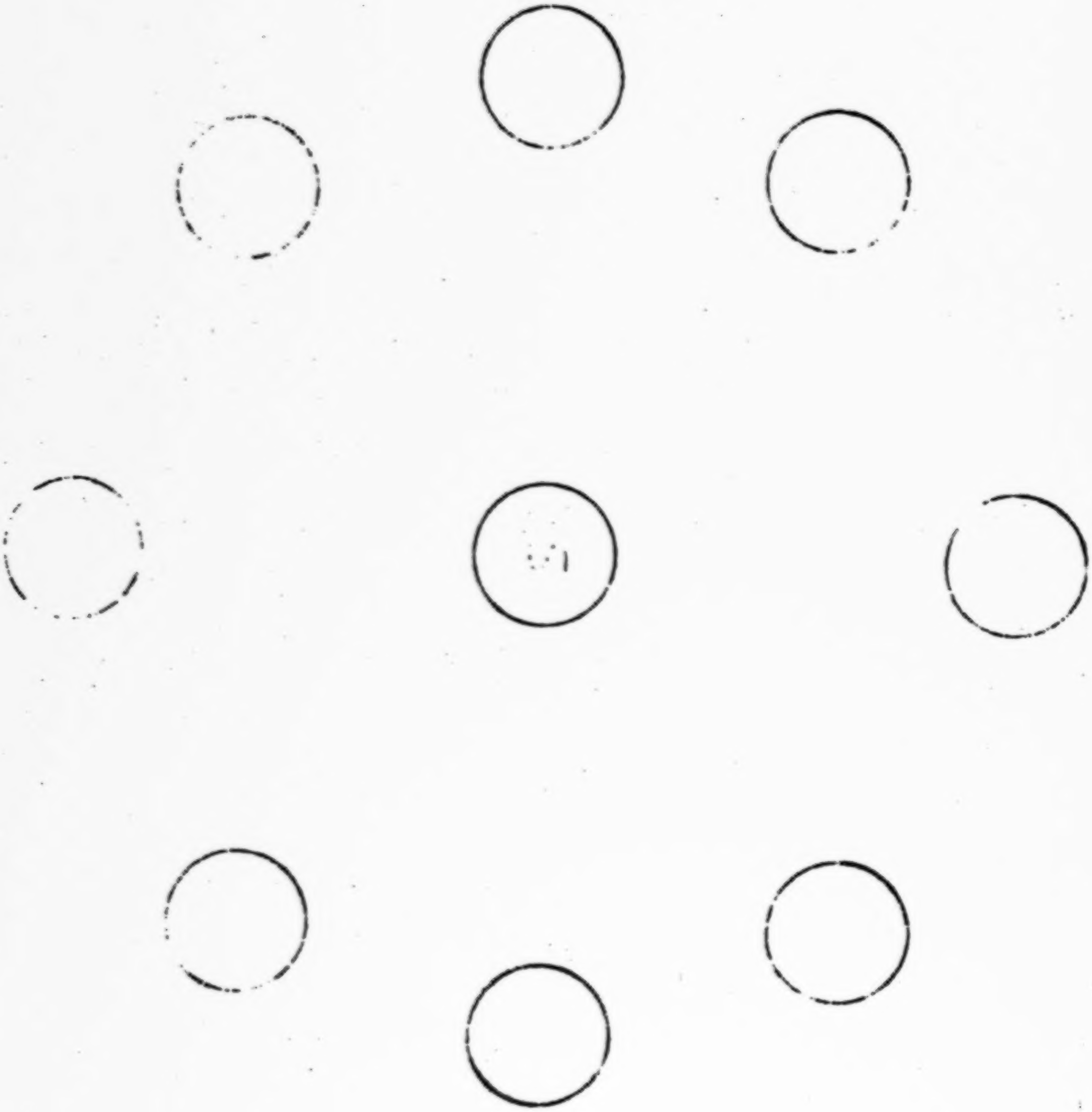
TASK NINE



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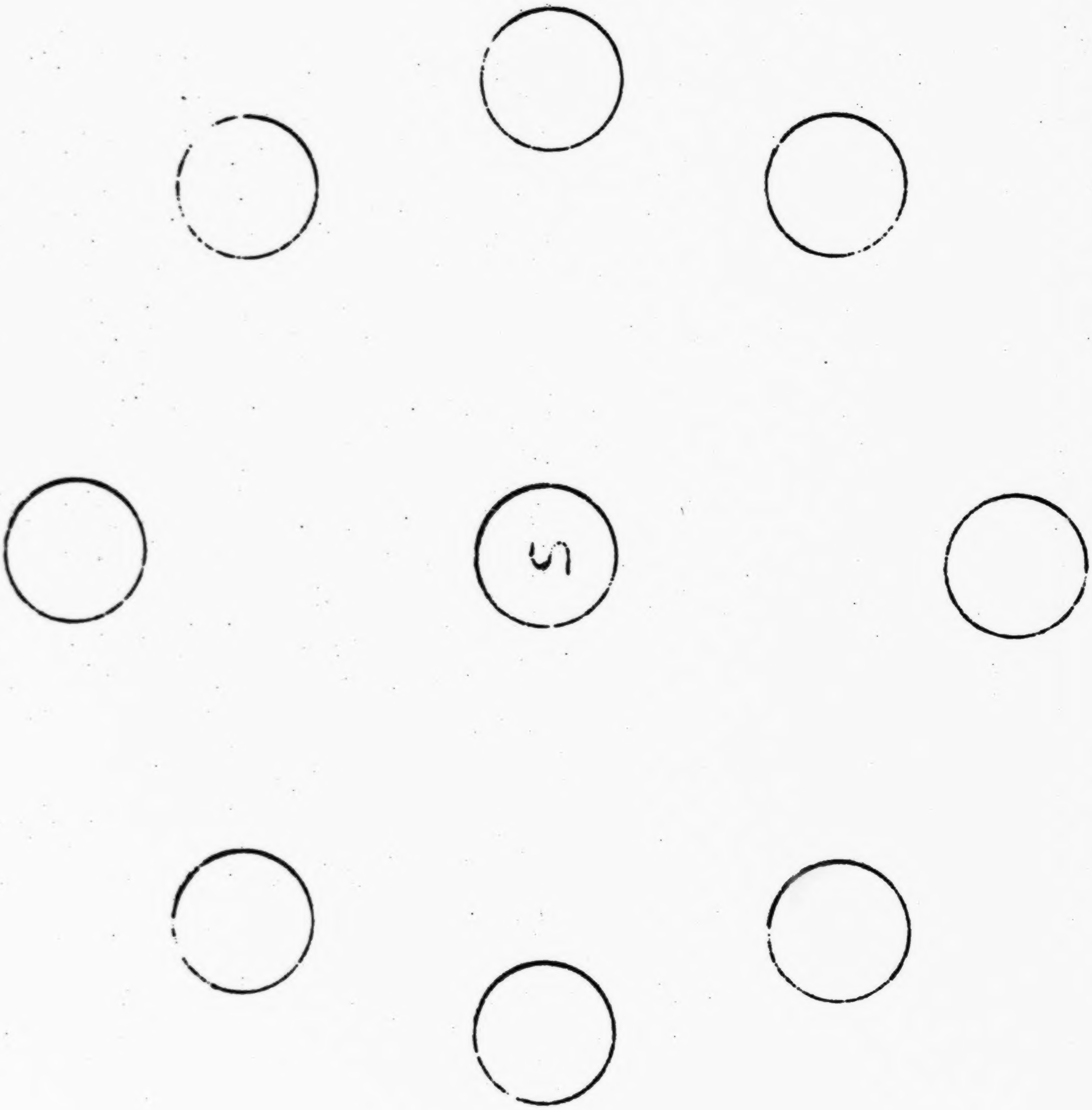
TASK TEN



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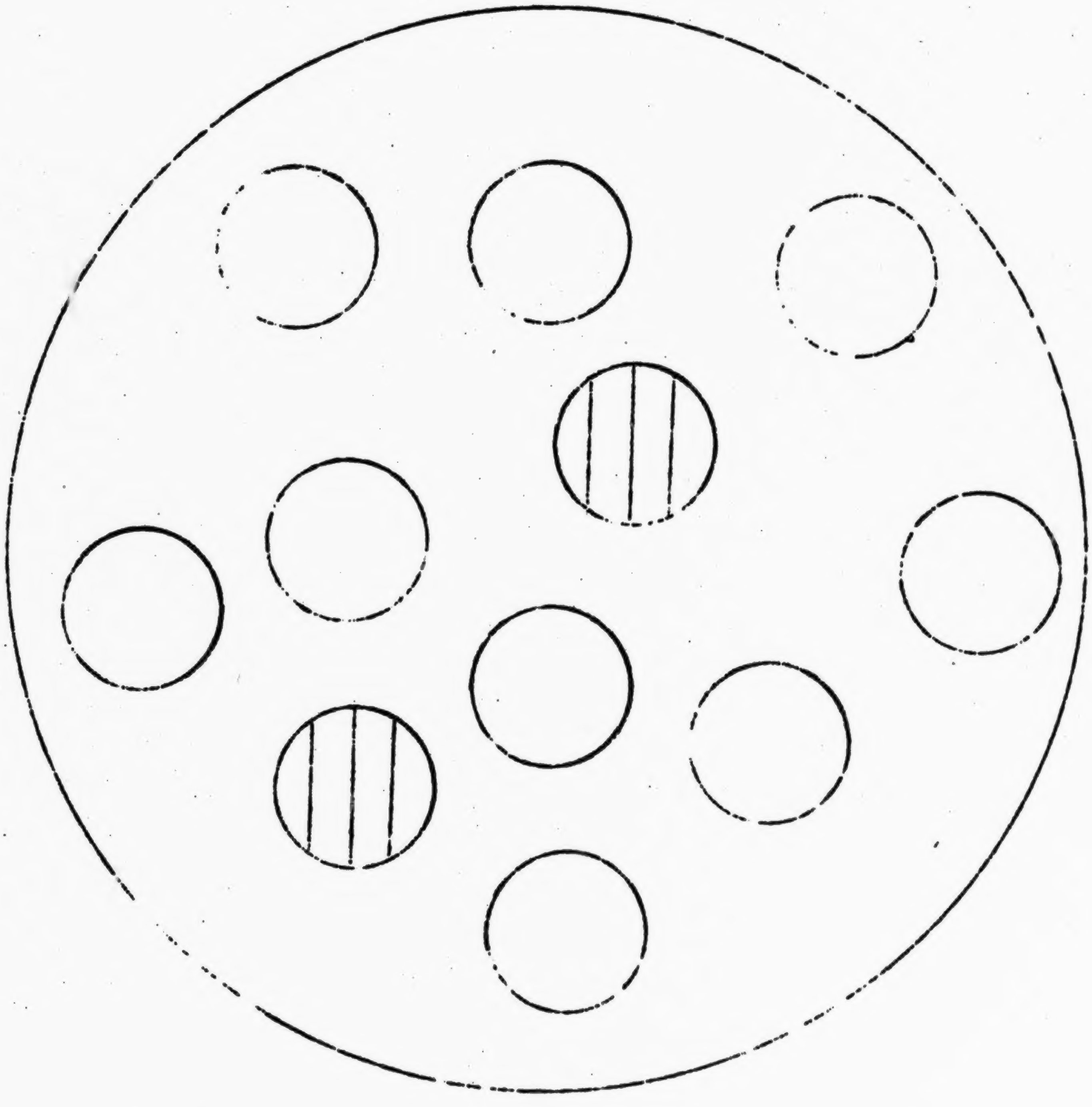
TASK ELEVEN



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APPENDIX B

ESSAY PROBLEM

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ESSAY PROBLEM

Do not turn this page until you are given the signal

On the following page you will be asked to discuss a certain topic.

Your task is to discuss the topic using the essay directions given on the following page.

Think about the problem first before you begin writing and then write as clearly as possible.

Make sure you complete your last sentence.

As soon as the signal is given, turn the page; read the essay directions on page 2 and begin on page 3.

Most people finish this essay in thirty (30) minutes.

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ESSAY DIRECTIONS

Given a topic:

a. State one possible point of view about the topic

b. Differentiate clearly between this first point of view and at least one other viewpoint. The alternate viewpoint should not reject or exclude the first point of view.

c. Then discuss similarities and differences among these viewpoints including alternate and conflicting reasons why these similarities and differences exist.

d. Discuss the meanings and relationships among the alternate and conflicting reasons for the existence of the similarities and differences among the viewpoints.

e. Finally, duscuss the alternatives in terms of how they may change over time, and in terms of how new conflicts may arise and lead to more effective solutions.

The topic to discuss is "rules" . . . .

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CODING FOR ESSAY PROBLEM

Score 1.0	State one possible point of view about the topic.
Score 2.0	State one possible point of view about the topic; a second viewpoint is inferred--it is not directly observable. One side of problem presented and supported more fully than the other.
Score 3.0	State one possible point of view about "rules". Differentiate clearly between this first point of view and at least one other viewpoint about "rules." More than two viewpoints may be given.
Score 3.5	1) Similarities are discussed between the viewpoints and are directly observable. 2) Similarities among the viewpoints are inferred. 3) Differences between the viewpoints are given and are directly observable. 4) Differences between the viewpoints are inferred. 5) Reasons given for one viewpoint.
Score 4.0	1) Similarities and differences among these viewpoints are observed. 2) Similarities and differences among these viewpoints are inferred. 3) Similarities among these viewpoints are given with reasons why these similarities exist; is observed. 4) Similarities among these viewpoints are given along with reasons why these similarities exist; is inferred. 5) Differences among these viewpoints are given along with reasons why these differences exist; is observed. 6) Differences among these viewpoints are given along with reasons why these differences exist; is inferred. 7) Reasons given for both viewpoints observed. 8) Reasons for both viewpoints inferred.
Score 4.5	1) Similarities and differences among these viewpoints are given along with reasons why these similarities exist. 2) Similarities and differences among these viewpoints are given and the reasons why these similarities exist; are inferred. 3) Similarities and differences among these viewpoints are given and the reasons why these differences exist; are observed. 4) Similarities and differences among these viewpoints are given and the reasons why these differences exist; are inferred.

Score 5.0

1) Similarities and differences among these viewpoints are given including reasons why these similarities and differences exist; are observed.

2) Similarities and differences among these viewpoints are given including reasons why these similarities and differences exist; is inferred.

3) Two good viewpoints well explained; a good evaluation in terms of a compromise between viewpoints is given.

Score 5.5

1) Meanings and/or relationships among the reasons for the existence of the similarities among the viewpoints is observed.

2) Meanings and/or relationships among the reasons for the existence of the similarities among these viewpoints is inferred.

3) Meanings and/or relationships among the reasons for the existence of the differences among these viewpoints is observed.

4) Meanings and/or relationships among the reasons for the existence of the differences among these viewpoints is inferred.

Score 6.0

1) The meaning and/or relationships among the reasons for the existence of the similarities and differences among the viewpoints is observed.

2) The meaning and/or relationships among the reasons for the existence of the similarities and differences among the viewpoints is inferred.

Score 6.5

1) The alternatives are discussed in terms of how they may change over time--observed.

2) The alternatives are inferred in terms of how they may change over time.

3) The alternatives are observed in terms of how new conflicts may arise and perhaps lead to more effective solutions.

4) The alternatives are inferred in terms of how new conflicts may arise and perhaps lead to more effective solutions.

Score 7.0

1) The alternatives are discussed in terms of how they may change over time, and in terms of how new conflicts may arise and lead to more effective solutions--observed.

2) The alternatives are discussed in terms of how they may change over time, and in terms of how new conflicts may arise and lead to more effective solutions--inferred.

APPENDIX C

SELF COMPLEXITY

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____
Code

Instructions: Here is a list of words. You are to read the words quickly and check each one that you think describes YOU. You may check as many or as few words as you like--but be HONEST. Don't check words that tell what kind of a person you should be. Check words that tell what kind of person you really are.

1. ______able
2. ______active
3. ______afraid
4. ______alone
5. ______angry
6. ______anxious
7. ______ashamed
8. ______attractive
9. ______bad
10. ______beautiful
11. ______big
12. ______bitter
13. ______bold
14. ______brave
15. ______bright
16. ______busy
17. ______calm
18. ______capable
19. ______careful
20. ______careless
21. ______charming
22. ______cheerful
23. ______clean
24. ______clever
25. ______comfortable
26. ______content
27. ______cruel
28. ______curious
29. ______delicate
30. ______delightful
31. ______different
32. ______difficult
33. ______dirty
34. ______dull
35. ______dumb
36. ______eager
37. ______fair
38. ______faithful
39. ______false
40. ______fine
41. ______fierce
42. ______foolish
43. ______friendly
44. ______funny
45. ______ gay
46. ______generous
47. ______gentle
48. ______glad
49. ______good
50. ______great
51. ______happy
52. ______humble
53. ______idle
54. ______important
55. ______independent
56. ______jealous
57. ______kind
58. ______large
59. ______lazy
60. ______little

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61. ______lively
62. ______lonely
63. ______loud
64. ______lucky
65. ______mild
66. ______miserable
67. ______modest
68. ______neat
69. ______old
70. ______patient
71. ______peaceful
72. ______perfect
73. ______pleasant
74. ______polite
75. ______poor
76. ______popular
77. ______proud
78. ______quiet
79. ______quick
80. ______responsible
81. ______rough
82. ______rude
83. ______sad
84. ______selfish
85. ______sensible
86. ______serious
87. ______sharp
88. ______silly
89. ______slow
90. ______small

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APPENDIX D

PERCEPTION OF STUDENTS

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____

Teachers differ in the ways they think about themselves and about those students with whom they work. This may be important in working with others. Please give your immediate, first reaction to the items on the following pages.

On each sheet are pairs of words which are opposite in meaning, such as Talkative and Quiet. You are asked to describe yourself and several of the students with whom you have worked by placing a check in one of the six spaces on the line between the two words.

Each space represents how well the adjective fits the person you are describing, as if it were written:

Talkative________:________:________:________:________:________Quiet

Very talkative	Quite talkative	More talkative than quiet	More Quiet than talkative	Quite quiet	Very quiet

FOR EXAMPLE: If you were to describe yourself, and you ordinarily think of yourself as being quite talkative, you would put a check in the second space from the word talkative, like this:

Talkative________:____X____:________:________:________:________Quiet

If you ordinarily think of yourself as somewhat more quiet than talkative, you would put your check on the quiet side of the middle.

Talkative________:________:________:____X____:________:________Quiet

If you think of yourself as very quiet, you would use the space nearest the word quiet.

Talkative________:________:________:________:________:____X____Quiet

Look at the words at both ends of the line before you put in your check mark. Please remember that there are no right or wrong answers. Word rapidly; your first answer is likely to be the best. Please do not omit any items and mark each item only once.

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____
Code

Instructions: Here is a list of words. You are to read the words quickly and check each one that you think describes YOU. You may check as many or as few words as you like-but be HONEST. Don't check words that tell what kind of a person you should be. Check words that tell what kind of a person you really are.

1.______able
2.______active
3.______afraid
4.______alone
5.______angry
6.______anxious
7.______ashamed
8.______attractive
9.______bad
10.______beautiful
11.______big
12.______bitter
13.______bold
14.______brave
15.______bright
16.______busy
17.______calm
18.______capable
19.______careful
20.______careless
21.______charming
22.______cheerful
23.______clean
24.______clever
25.______comfortable
26.______content
27.______cruel
28.______curious
29.______delicate
30.______delightful
31.______different
32.______difficult
33.______dirty
34.______dull
35.______dumb
36.______eager
37.______fair
38.______faithful
39.______false
40.______fine
41.______fierce
42.______foolish
43.______friendly
44.______funny
45.______gay
46.______generous
47.______gentle
48.______glad
49.______good
50.______great
51.______happy
52.______humble
53.______idle
54.______important
55.______independent
56.______jealous
57.______kind
58.______large
59.______lazy
60.______little

61._____lively

62._____lonely

63._____loud

64._____lucky

65._____mild

66._____miserable

67._____modest

68._____neat

69._____old

70._____patient

71._____peaceful

72._____perfect

73._____pleasant

74._____polite

75._____poor

76._____popular

77._____proud

78._____quiet

79._____quick

80._____responsible

81._____rough

82._____rude

83._____sad

84._____selfish

85._____sensible

86._____serious

87._____sharp

88._____silly

89._____slow

90._____small

5695

Scale Sheet 2

Think of the student with whom you can work best. He may be someone whom you have worked with in the past or at present. He does not have to be the student you like best, but the student who has really achieved in the broadest academic sense under you. Describe this person as he appears to you.

Friendly ______ : ______ : ______ : ______ : ______ : ______ Unfriendly
Cooperative ______ : ______ : ______ : ______ : ______ : ______ Uncooperative
Quitting ______ : ______ : ______ : ______ : ______ : ______ Persistent
Stable ______ : ______ : ______ : ______ : ______ : ______ Unstable
Confident ______ : ______ : ______ : ______ : ______ : ______ Unsure
Shy ______ : ______ : ______ : ______ : ______ : ______ Sociable
Upset ______ : ______ : ______ : ______ : ______ : ______ Calm
Bold ______ : ______ : ______ : ______ : ______ : ______ Timid
Ungrateful ______ : ______ : ______ : ______ : ______ : ______ Grateful
Energetic ______ : ______ : ______ : ______ : ______ : ______ Tired
Impatient ______ : ______ : ______ : ______ : ______ : ______ Patient
Softhearted ______ : ______ : ______ : ______ : ______ : ______ Hardhearted
Thoughtless ______ : ______ : ______ : ______ : ______ : ______ Thoughtful
Frank ______ : ______ : ______ : ______ : ______ : ______ Reserved
Meek ______ : ______ : ______ : ______ : ______ : ______ Forceful
Careless ______ : ______ : ______ : ______ : ______ : ______ Careful
Easygoing ______ : ______ : ______ : ______ : ______ : ______ Quick-tempered
Practical ______ : ______ : ______ : ______ : ______ : ______ Impractical
Boastful ______ : ______ : ______ : ______ : ______ : ______ Modest
Intelligent ______ : ______ : ______ : ______ : ______ : ______ Unintelligent

5696

Gloomy______:______:______:______:______:______Cheerful

Responsible______:______:______:______:______:______Undependable

Unrealistic______:______:______:______:______:______Realistic

Efficient______:______:______:______:______:______Inefficient

5697

Scale Sheet 3 ____________________

Think of the student with whom you can work least well. He may be someone whom you have worked with in the past or at present. He should be the student with whom you would have the most difficulty in helping to academically achieve. Describe this person as he appears to you.

Friendly ____:____:____:____:____:____ Unfriendly

Cooperative ____:____:____:____:____:____ Uncooperative

Quitting ____:____:____:____:____:____ Persistent

Stable ____:____:____:____:____:____ Unstable

Confident ____:____:____:____:____:____ Unsure

Shy ____:____:____:____:____:____ Sociable

Upset ____:____:____:____:____:____ Calm

Bold ____:____:____:____:____:____ Timid

Ungrateful ____:____:____:____:____:____ Grateful

Energetic ____:____:____:____:____:____ Tired

Impatient ____:____:____:____:____:____ Patient

Softhearted ____:____:____:____:____:____ Hardhearted

Thoughtless ____:____:____:____:____:____ Thoughtful

Frank ____:____:____:____:____:____ Reserved

Meek ____:____:____:____:____:____ Forceful

Careless ____:____:____:____:____:____ Careful

Easygoing ____:____:____:____:____:____ Quick-tempered

Practical ____:____:____:____:____:____ Impractical

Boastful ____:____:____:____:____:____ Modest

Intelligent ____:____:____:____:____:____ Unintelligent

5698

Gloomy______:______:______:______:______:______Cheerful

Responsible______:______:______:______:______:______Undependable

Unrealistic______:______:______:______:______:______Realistic

Efficient______:______:______:______:______:______Inefficient

SCORING KEY EXPRESSED PERCEPTION SCALE

1.	6	5	4	3	2	1
2.	6	5	4	3	2	1
3.	1	2	3	4	5	6
4.	6	5	4	3	2	1
5.	6	5	4	3	2	1
6.	1	2	3	4	5	6
7.	1	2	3	4	5	6
8.	0	0	0	0	0	0
9.	1	2	3	4	5	6
10.	6	5	4	3	2	1
11.	1	2	3	4	5	6
12.	6	5	4	3	2	1
13.	1	2	3	4	5	6
14.	0	0	0	0	0	0
15.	0	0	0	0	0	0
16.	1	2	3	4	5	6
17.	6	5	4	3	2	1
18.	6	5	4	3	2	1
19.	1	2	3	4	5	6
20.	6	5	4	3	2	1
21.	1	2	3	4	5	6
22.	6	5	4	3	2	1
23.	1	2	3	4	5	6
24.	6	5	4	3	2	1

APPENDIX E

ATTITUDE TOWARD THE POOR

5701

Code______________________

OPERATION HEADSTART WORKER'S ATTITUDE SCALE

Part I

The following statements have no right or wrong answers. All that is required is that you give your honest reaction to each question. After reading each statement, simply check ( ) the alternative that indicates your own opinion. After reading each statement, make one of the following five choices:

Strongly Agree, Agree, Not Sure, Disagree, Strongly Disagree

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. I would enjoy working with poor people to help them better their lives.	____	____	____	____	____
2. Poor people tend to behave in childish ways.	____	____	____	____	____
3. Poverty is largely a function of bad luck, injustice, or discrimination.	____	____	____	____	____
4. I would be embarrassed to introduce a poor person to my friends.	____	____	____	____	____
5. Poor people are less trustworthy than people with more money.	____	____	____	____	____
6. In general, poor people lack intelligence.	____	____	____	____	____
7. The city, state, and federal government should do all it can in trying to help poor people better their lives.	____	____	____	____	____

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
8. Poor people tend to be as interested in their children as are people with more money.	____	____	____	____	____
9. Violent behavior characterizes the poor.	____	____	____	____	____
10. Most poor people do not know what they want out of life.	____	____	____	____	____
11. Poor people deserve as much respect and consideration as anyone else.	____	____	____	____	____
12. Most poor people are poor because they are lazy.	____	____	____	____	____
13. It's hard for an able-bodied man to respect himself if he doesn't work.	____	____	____	____	____
14. Immoral practices are much more common among the poor.	____	____	____	____	____
15. We should try to help only those who appreciate our help.	____	____	____	____	____
16. Just about every type of personality can be found among the poor.	____	____	____	____	____
17. Poverty is a sign of failure in life.	____	____	____	____	____
18. Poverty is quite often due to lack of self-control, will-power, or the desire to get ahead.	____	____	____	____	____

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
19. Poor people would improve themselves if they were given additional opportunities.	___	___	___	___	___
20. How much money a person makes is usually a good indicator of his character.	___	___	___	___	___
21. There is little that can be done to help the poor to better themselves short of taking care of them or giving them money.	___	___	___	___	___
22. Most poor people are willing to work hard if given the opportunity.	___	___	___	___	___
23. In general, the behavior of poor people tends to be erratic and unpredictable.	___	___	___	___	___
24. Poor people don't care how they look.	___	___	___	___	___
25. It is the responsibility of people who are well off to help poor people better themselves.	___	___	___	___	___
26. Poor people tend to be loud, vulgar, and impolite.	___	___	___	___	___
27. Poor people will take advantage of you if you give them the opportunity.	___	___	___	___	___

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
28. It would be all right with me to have a poor person as a close friend.	____	____	____	____	____
29. Poor people are inherently different from people who have more money.	____	____	____	____	____
30. Poor people should have something to say about how the government spends money to help them.	____	____	____	____	____

5705

SCORING KEY OPERATION HEAD START WORKERS ATTITUDE SCALE

Part 1

1.	5	4	3	2	1
2.	1	2	3	4	5
3.	5	4	3	2	1
4.	1	2	3	4	5
5.	1	2	3	4	5
6.	0	0	0	0	0
7.	5	4	3	2	1
8.	5	4	3	2	1
9.	0	0	0	0	0
10.	1	2	3	4	5
11.	5	4	3	2	1
12.	1	2	3	4	5
13.	5	4	3	2	1
14.	0	0	0	0	0
15.	1	2	3	4	5
16.	5	4	3	2	1
17.	1	2	3	4	5
18.	1	2	3	4	5
19.	5	4	3	2	1
20.	1	2	3	4	5
21.	1	2	3	4	5
22.	5	4	3	2	1
23.	1	2	3	4	5
24.	1	2	3	4	5
25.	5	4	3	2	1
26.	0	0	0	0	0
27.	1	2	3	4	5
28.	5	4	3	2	1
29.	1	2	3	4	5
30.	5	4	3	2	1